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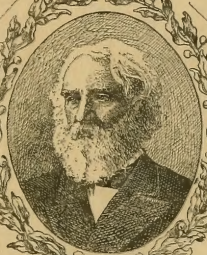

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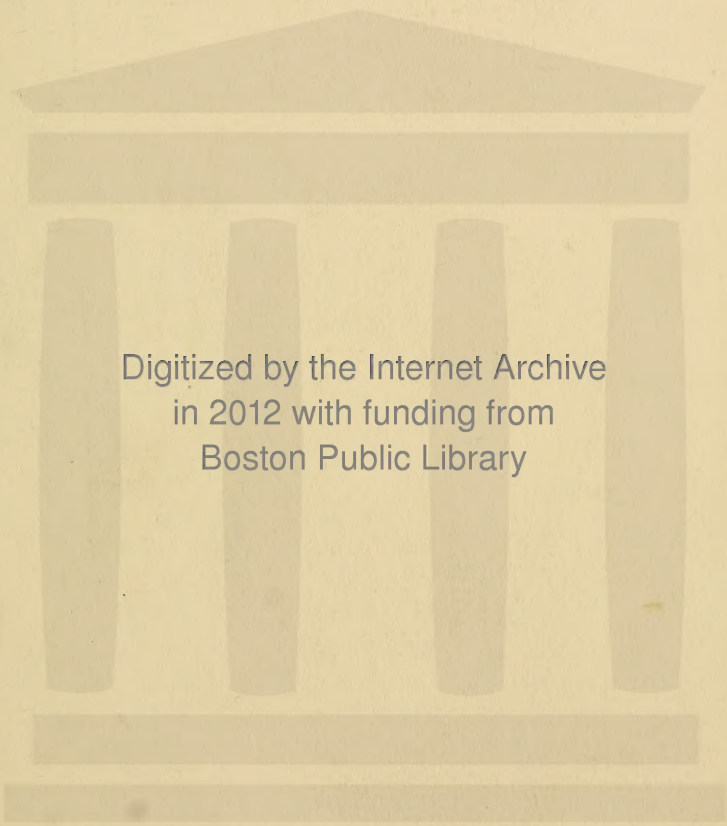
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IN TWENTY VOLUMES

VOLUME XII

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Summer Foliage, Walden Pond (*page 328*)

THE WRITINGS OF

HENRY DAVID THOREAU

JOURNAL

EDITED BY BRADFORD TORREY

VI

DECEMBER 1, 1853–AUGUST 31, 1854

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CONTENTS

CHAPTER I. December, 1853 (Æt. 36) 3

The Ever-Reds — The Penobscot and the Concord — Tree Sparrows — Muskrats' Galleries — The Power of Waves — Fresh-Water Clams — A Fire in the Snow — Ancient Inscriptions — The Evergreens of the Forest Floor — An Owl — Ice-Crystals — An Optical Puzzle — Gray Squirrels — Hoar Frost — Lecturing and Surveying — Getting a Christmas-Tree — Cocoons — A Talk with Therien — The Whooping of the Pond — Cities viewed as Wharves — Snow on Trees — An Irishman seeking Work — Drifting Snow — Race-Extinction — The Snowed-up Village — The Snow Bunting — Another Talk with Therien — Measuring the Snow — Hibernation — The Sweetness of Sound — A Gray Squirrel's Track.

CHAPTER II. January, 1854 (Æt. 36) 42

Snow-Drifts — Footprints in the Snow — Indian Oratory — A Precious Stone — Snow-Fleas — A Walk with Tappan — Crime among the Iroquois — The Hooting of an Owl — Atmosphere in Landscape — A Downy Woodpecker — Gilpin on Beauty — Gilpin on Landscape — Another Walk with Tappan — Nature's Winter Palace — Rain and Thaw — A Puzzling Sound — Cato on Farming — A Coat from the Tailor's — Notes from Cato — Dr. T. W. Harris — Notes from Varro — Before-Light Occupations — Notes from Josselyn — An Old Account-Book — An Auction — Three Kinds of Ice — More Notes from Varro — A White Hare — Up River on the Ice and Snow — The Uses of Winter — A Mild Winter Day — A Load of Bark — Winter Thoughts.

CHAPTER III. February, 1854 (Æt. 36) 90

The Anticipation of Spring — The Attractions of the Hollowell Farm — Notes from Varro — Old Account-Books —

Man and his House — A Fox's Track — The Heroism of the Muskrat — Sand Foliage — The Trail of the Fox — Notes from Sir U. Price on the Picturesque — A Fire on the Ice — Cato on Farming — Varro on Country Life — A Soft Air — Therien and the Chickadees — Roman Ninth-Day Towns — Snow-Fleas — The Catkins of the Alder and the Willow — An Ice-Fleet — Skating — A Muskrat-House — The Thundering of the Pond — Some Winter Birds — White Rabbits — Columella on Climate — Tracks in the Snow — Gowing's Swamp — Congress — Promethea Cocoons — Lichens and Study — Building a Fire — New-fallen Snow — Snow-Drifts — Measuring the Ice — Tracks in the Snow — Notes from Kane — A Freezing Rain — Rabbits.

CHAPTER IV. March, 1854 (Æt. 36) 145

The First Spring Morning — The Birds of the Winter — The First Bluebird — The Sand Foliage — Golden Senecio Leaves — The Melting of the Ice — Nut Meadow Brook — Lingering Snow — A Bluebird — Mountain Cranberry — Rock-Tripe — Ducks on the River — A Skunk — The Air full of Birds — Water and Ice — Blue Water — Clark on Telescopes — A Company of Fox-colored Sparrows — Song Sparrows and Ducks — A High Wind — Black Ducks — Minott's Homekeeping — March Weather — Saint-Hilaire — Instinct in Criticism.

CHAPTER V. April, 1854 (Æt. 36) 180

Dry Weather — The Flicker's Cackle — The River falling — Hawks and Farmers — Butterflies and Frogs — The Lecturer's Theme — The Croaking Frogs — Criticising a Composition — Sundry Birds and Flowers — Man and Music — An Injury to the River — A Wood Fungus — A Sparrow in the House — Politeness and Simplicity — Statistics and the American Mind — Snipes on the Meadow — April Snow — Early Vegetation — Bees and Willow Blossoms — Wisdom and Living — Vegetation and Birds — Some April Birds — A White-headed Eagle — Two Mergansers — Shepherd's-Purse — The Ruby-crowned Wren — Snoring Frogs — Myrtle-Birds — An

Unprofaned Hour — Faithfulness to one's Genius — The Rise and Fall of Walden — Supply and Demand — A Blue Heron.

CHAPTER VI. May, 1854 (Æt. 36) 231

Muskrat-Shooting — The Leafing of Trees and Shrubs — Observation and Life — The *Viola ovata* — Dark-blue Water — The Muskrat-Hunters — Flowers and the Weather — The Fall of the Oak Leaves — The Waves on the Meadow — A Small Hawk — Sailing on the River — Fighting Tortoises — Long Wharf — The Oven-Bird — Two Snakes — Tall's Island — A Talk with Rice — The Leafing Trees — A Distant Thunder-Shower — The Earliest Trees to leaf — After the Shower — The First Warm Weather — Sundry Birds — Nuttall's "Sylva" — Up River with Sanborn — A Boiling Spring — Young Oak Leaves — A Snapping Turtle — Another Snapping Turtle — The Leafing of the Woods — The Turtle's Snapping — Sailing in a Light Breeze — Oak Galls — Leafing Trees and Shrubs — The Song of the Meadows — The Summer Morning Air — Dragon-Flies — A Button-Bush Hummock — Conantum — The Crickets' Song — The Bent Grass on the Water — The Limitations of Nature — Bank Swallows — *Andromeda Polifolia* — The Order of Leafing — A Rose-breasted Grosbeak — Rye — The Pincushion Oak Galls — Toads, Frogs, and Insects — The Whortleberry Family — The Inhumanity of Science — Shad-Flies — The Anthony Burns Case — Massachusetts and Slavery — Arethusa and Wild Pink — A Greater Telltale — Old Election Day.

CHAPTER VII. June, 1854 (Æt. 36) 320

Oak Galls — The Birth of Shadow — A Flight of Ephemeræ — The River Clams — The Injustice of Fame — A Nighthawk — Painted Tortoises laying Eggs — Oak Leaves — Tracks of Turtles — A Snapping Turtle — "Artificial Wants" — The Great Fringed Orchis — The Anthony Burns Affair — The Upper Sudbury River — The Evergreen-Forest Bird — River-Plants — The Cricket's Homely Chirp — Harvest-Flies — Dew — The Water-Lily — Flowers and Morality — The Anthony Burns Affair again — Beauty and Baseness — Wild

Roses — Mountain Laurel — An Ocean of Fog — The Fugitive Slave Law and the Constitution — The Season of Small Fruits — The Burns Affair — A Snapping Turtle's Nest — The "Tweezer-Bird" — A Free-Man Party wanted — A Thunder-Shower — A School of Young Pouts — Grassy Hollows — Miscellaneous Notes — Large Black Birches.

CHAPTER VIII. July, 1854 (Æt. 36–37) 380

Red Lilies — The Pontederias — Bathing — A Box Tortoise — The River by Moonlight — Birds in July — The Reign of River Weeds — A Pickerel — Blueberries — The Bay-Wing's Song — Pontederia — The Closing of the Water-Lilies — Noonday on the River — A Hot Midsummer Day — An Up-Country Eden — Bees in Bass Trees — A Thunder-Shower — Hot Weather and Showers — The Shorn Fields — Yellow Butterflies — The Afternoon of the Year.

CHAPTER IX. August, 1854 (Æt. 37) 415

Society and Privacy — A Still Evening — A Specimen Copy of "Walden" — The River's Brim — The Meadow-Haying — Tarbell Hills — The Off Side of Summer — The Sting of a Wasp — "Walden" published — Purple Grass — *Viburnum nudum* Berries — August Birds — The Fall of the Brakes — A Yearning for Solitude — Apple Trees — The Smoke of a Meadow Burning — Natural Terraces — Through Unknown Country — In Acton and Carlisle — A Microscope — A Walk with John Russell — Shadows and Reflections — Blanding's Tortoise — Murder for the Sake of Science — Myriophyllum — The Meadow seen through Haze — A Thin, Dry Soil — Bird-Life in August — A Wounded Sucker — Clams and their Tracks — *Eupatorium purpureum* — A Prairial Walk — Dead Fishes and Blue Heron — Gowing's Swamp — Lily Pads — Dog-Day Haze — Purple Grass — Snapping Turtles' Eggs — Miles and the Mud Turtles — The "Castile Soap" Gall — Walks across Lots — Dying Fishes — The Gall Insect's Egg — Cooler Weather — The Lecturer's Threshing — Drought — Smoke in the Air.

ILLUSTRATIONS

SUMMER FOLIAGE, WALDEN POND (*page* 328)
Frontispiece

THE LEANING HEMLOCKS IN WINTER 94

SHAD-BUSH IN BLOSSOM 254

GREAT FRINGED ORCHIS 338

FERNS IN CLINTONIA SWAMP 406

THE JOURNAL OF HENRY DAVID THOREAU

VOLUME VI

I

DECEMBER, 1853 (ÆT. 36)

Dec. 1. 4 P. M. — To Cliffs.

We may infer that every withered culm of grass or sedge, or weed that still stands in the fields, answers some purpose by standing.

Those trees and shrubs which retain their withered leaves through the winter — shrub oaks and young white, red, and black oaks, the lower branches of larger trees of the last-mentioned species, hornbeam, etc., and young hickories — seem to form an intermediate class between deciduous and evergreen trees. They may almost be called the ever-reds. Their leaves, which are falling all winter long, serve as a shelter to rabbits and partridges and other winter quadrupeds and birds. Even the little chickadees love to skulk amid them and peep out from behind them. I hear their faint, silvery, lisping notes, like tinkling glass, and occasionally a sprightly *day-day-day*, as they inquisitively hop nearer and nearer to me. They are our most honest and innocent little bird, drawing yet nearer to us as the

winter advances, and deserve best of any of the walker.

Dec. 2. As the stars, though spheres, present an outline of many little points of light to our eyes, like a flower of light, so I notice to-night the horns of the new moon appear split.

The skeleton which at first sight excites only a shudder in all mortals becomes at last not only a pure but suggestive and pleasing object to science. The more we know of it, the less we associate it with any goblin of our imaginations. The longer we keep it, the less likely it is that any such will come to claim it. We discover that the only spirit which haunts it is a universal intelligence which has created it in harmony with all nature. Science never saw a ghost, nor does it look for any, but it sees everywhere the traces, and it is itself the agent, of a Universal Intelligence.

A communication to a newspaper, dated Bangor, 28th (November), says of the Penobscot: "The navigation is closed here, the anchor ice with the surface ice making an obstruction of several feet thickness. There are enclosed in the ice from 60 to 80 vessels with full cargoes, besides the steamers. . . . The ice obstruction extends about five miles," etc. There is still no ice in the Concord River, or the skimming which forms along the shore in the night almost entirely disappears in the day. On the 30th I paddled on it in the afternoon, and there was not a particle of ice, and even in the morning my constantly wet hands were not cold.

The latitude of Lynn church is 42° 27′ 51″. Calling

Concord, at a venture, 42° 27′, Bangor being 44° 47′ 50″, the difference equals about 2° 21′. The length of a degree of latitude in Italy (43° 1′) being, according to Boscovich and Lemaire's measurement, 68.998 English miles, call it in this case 69 miles, and the difference of latitude in miles between B. and C. is about 162 miles.

Dec. 3. P. M. — Up river by boat to Clamshell Hill. Saw two tree sparrows on Monroe's larch by the waterside. Larger than chip-birds, with more bay above and a distinct white bar on wings, not to mention bright-chestnut crown and obscure spot on breast; all beneath pale-ash. They were busily and very adroitly picking the seeds out of the larch cones. It would take man's clumsy fingers a good while to get at one, and then only by breaking off the scales, but they picked them out as rapidly as if they were insects on the outside of the cone, uttering from time to time a faint, tinkling chip.

I see that muskrats have not only erected cabins, but, since the river rose, have in some places dug galleries a rod into the bank, pushing the sand behind them into the water. So they dig these now as places of retreat merely, or for the same purpose as the cabins, apparently. One I explored this afternoon was formed in a low shore (Hubbard's Bathing-Place), at a spot where there were no weeds to make a cabin of, and was apparently never completed, perhaps because the shore was too low.

The ranunculus is still a fresh bright green at the

bottom of the river. It is the evergreen of the river, and indeed resembles the common running evergreen (*Lycopodium*, I think it is called).

I see along the sides of the river, two to four inches above the surface but all at one level, clear, drop-shaped crystals of ice, either held up by some twig or hanging by a dead vine of climbing mikania. They are the remains of a thin sheet of ice, which melted as the river went down, and in drops formed around and ran down these cores and again froze, and, being thicker than the surrounding ice, have outlasted it.

At J. Hosmer's tub spring, I dug out a small bullfrog (?) in the sandy mud at the bottom of the tub — it was lively enough to hop — and brought it home. Probably they lie universally buried in the mud now, below the reach of frost. In a ditch near by, under ice half an inch thick, I saw a painted tortoise moving about. The frogs then are especially to be looked for in the mud about springs.

It is remarkable how much power I can exert through the undulations which I produce by rocking my boat in the middle of the river. Some time after I have ceased I am surprised to hear the sound of the undulations which have just reached the shores acting on the thin ice there and making a complete wreck of it for a long distance up and down the stream, cracking off pieces four feet wide and more. I have stirred up the river to do this work, a power which I cannot put to rest. The secret of this power appears to lie in the extreme mobility, or, as I may say, irritability, of this element. It is the principle of the roller, or of an immense

weight moved by a child on balls, and the momentum is tremendous.

Some of the clamshells, freshly opened by the musk-rats and left lying on their half-sunken cabins, where they are kept wet by the waves, show very handsome rainbow tints. I examined one such this afternoon. The hinge of the shell was not broken, and I could discover no injury to the shell, except a little broken off the edges at the broadest end, as if by the teeth of the rat in order to get hold, insert its incisors. The fish is confined to the shell by strong muscles at each end of each valve, and the rat must dissolve the union between both of these and one side of the shell before he can get it open, unless the fish itself opens it, which perhaps it cannot wide enough. I could not open one just dead without separating the muscle from the shell. The growth of the mussel's shell appears to be in somewhat concentric layers or additions to a small shell or eye.

The clam which I brought home the 30th *ult.*, and left outdoors by mistake, I now find frozen to death. J. Hosmer told me the other day that he had seen a man eat many of these clams raw and relish them. It is a somewhat saddening reflection that the beautiful colors of this shell for want of light cannot be said to exist, until its inhabitant has fallen a prey to the spoiler, and it is thus left a wreck upon the strand. Its beauty then beams forth, and it remains a splendid cenotaph to its departed tenant, symbolical of those radiant realms of light to which the latter has risen, — what glory he has gone to. And, by the way, as long as they remain in "the dark unfathomed caves of ocean,"

they are not "gems of purest ray serene," though fitted to be, but only when they are tossed up to light.

Probably the muskrat inserts his incisors between the edges of the shells (and so crumbles them) in order to pry them open. Some of these shells at Clamshell Hill, whose contents were cooked by the Indians, are still entire, but separated. Wood has spread a great many loads over his land. People would be surprised to learn what quantities of these shellfish are annually consumed by the muskrat. Their shells help convert the meadow mud or river sediment into food for plants. The Indians generally — I have particularly observed it in the case of the Penobscots — make a very extensive use of the muskrat for food, and from these heaps it would seem that they used the fresh-water clam extensively also, — these two peculiarly indigenous animals. What if it were calculated how often a muskrat rises to his stool on the surface of the ice with a mussel in his mouth and ejects the tenant, taking the roof?

It is as if the occupant had not begun to live until the light, with whatever violence, is let into its shell with these magical results. It is rather a resurrection than a death. These beaming shells, with the tints of the sky and the rainbow commingled, suggest what pure serenity has occupied it.

Look at the trees, bare or rustling with sere brown leaves, except the evergreens, their buds dormant at the foot of the leaf-stalks. Look at the fields, russet and withered, and the various sedges and weeds with dry bleached culms. Such is our relation to nature at

present; such plants are we. We have no more sap nor verdure nor color now.

I remember how cheerful it has been formerly to sit around a fire outdoors amid the snow, and, while I felt some cold, to feel some warmth also, and see the fire gradually increasing and prevailing over damp, steaming and dripping logs and making a warm hearth for me.

When I see even these humble clamshells lying open along the riverside, displaying some blue, or violet, or rainbow tints, I am reminded that some pure serenity has occupied them. (I sent two and a half bushels of my cranberries to Boston and got four dollars for them.) There the clam dwells within a little pearly heaven of its own.

But even in winter we maintain a temperate cheer and a serene inward life, not destitute of warmth and melody. Only the cold evergreens wear the aspect of summer now and shelter the winter birds.

Layard discovers sculptured on a slab at Kouyunjik (Nineveh) machines for raising water which I perceive correspond exactly to our New England well-sweeps, except that in the former case the pole is "balanced on a shaft of masonry." He observes that it is "still generally used for irrigation in the East, as well as in southern Europe, and called in Egypt a *shadoof*." [1]

Dec. 4. *Sunday.* The coldest day yet, clear with considerable wind, after the first cloudless morning for a week or two. Goose Pond apparently froze over last

[1] Wilkinson exhibits it from the Egyptian sculptures.

night, all but a few rods, but not thick enough to bear. I see a lizard [*sic*] on the bottom under the ice. No doubt I have sometimes mistaken them for tadpoles. (Flint's Pond only skimmed a little at the shore, like the river.) The ice of Goose Pond already has a dusty look. It shows the crystals distinctly.

Dec. 5. P. M. — Got my boat in. The river frozen over thinly in most places and whitened with snow, which was sprinkled on it this noon.

4 P. M. — To Cliffs.

Many living leaves are very dark red now, the only effect of the frost on them, — the checkerberry, andromeda, low cedar, and more or less lambkill, etc. Saw and heard a downy woodpecker on an apple tree. Have not many winter birds, like this and the chickadee, a sharp note like tinkling glass or icicles? The *chip* of the tree sparrow, also, and the whistle of the shrike, are they not wintry in the same way? And the sonorous hooting owl? But not so the jay and *Fringilla linaria*, and still less the crow. Now for the short days and early twilight, in which I hear the sound of woodchopping. The sun goes down behind a low cloud, and the world is darkened. The partridge is budding on the apple tree and bursts away from the path-side. Fair Haven Pond is skimmed completely over. The ground has been frozen more or less about a week, not very hard. Probably stiffened the 3d so as to hinder spading, but softened afterward. I rode home from the woods in a hay-rigging, with a boy who had been collecting a load of dry leaves for the hog-pen; this the

third or fourth load. Two other boys asked leave to ride, with four large empty box-traps which they were bringing home from the woods. It was too cold and late to follow box-trapping longer. They had caught five rabbits this fall, baiting with an apple.[1] Before I got home the whole atmosphere was suddenly filled with a mellow yellowish light equally diffused, so that it seemed much lighter around me than immediately after the sun sank behind the horizon cloud, fifteen minutes before. Apparently not till the sun had sunk thus far did I stand in the angle of reflection.

It is a startling thought that the Assyrian king who with so much pains recorded his exploits in stone at Nineveh, that the story might come down to a distant generation, has indeed succeeded by those means which he used. All was not vanity, quite.

Layard, at the lake of Wan, says: "Early next morning I sought the inscriptions which I had been assured were graven on the rocks near an old castle, standing on a bold projecting promontory above the lake. After climbing up a dangerous precipice by the help of two or three poles, in which large nails had been inserted to afford a footing, I reached a small natural cave in the rock. A few crosses and ancient Armenian letters were rudely cut near its entrance. There was nothing else, and I had to return as I best could, disappointed, as many a traveller has been under similar circumstances before me." They were not old enough; that was all. Wait a thousand years and you will not be disappointed.

[1] [Channing, p. 108.]

Dec. 7. Wednesday. P. M. — To Trillium Woods and Hubbard's Close.

In the latter part of November[1] and now, before the snow, I am attracted by the numerous small evergreens on the forest floor, now most conspicuous, especially the very beautiful *Lycopodium dendroideum*, somewhat cylindrical, and also, *in this grove*, the variety *obscurum* of various forms, surmounted by the effete spikes, some with a spiral or screw-like arrangement of the fan-like leaves, some spreading and drooping. It is like looking down on evergreen trees. And the *L. lucidulum* of the swamps, forming broad, thick patches of a clear liquid green, with its curving fingers; also the pretty little fingers of the cylindrical *L. clavatum*, or club-moss, zigzagging amid the dry leaves; not to mention the spreading openwork umbrellas of the *L. complanatum*, or flat club-moss, all with spikes still. Also the liquid wet glossy leaves of the *Chimaphila* (winter or snow-loving) *umbellata*, with its dry fruit. Not to mention the still green *Mitchella repens* and checkerberry in shelter, both with fruit; gold-thread; *Pyrola secunda*, with drooping curled-back leaves, and other pyrolas; and, by the brooks, brooklime (?) (I mean such as at Cliff Brook and at brook in E. Hubbard's Swamp).[2] There is the mountain laurel, too. The terminal shield fern is quite fresh and green, and a common thin fern, though fallen. I observe the beds of greenish cladonia

[1] [The words "the latter part of" are crossed out in ink, but the word "retain," followed by an interrogation-point, is written over them.]

[2] Golden saxifrage. ["Brooklime" is crossed out in pencil.]

lichens. Saw a wood tortoise stirring in the now open brook in Hubbard's Swamp.

Dec. 8. 7 A. M. — How can we spare to be abroad in the morning red, to see the forms of the leafless eastern trees against the dun sky and hear the cocks crow, when a thin low mist hangs over the ice and frost in meadows? I have come along the riverside in Merrick's pasture to collect for kindling the fat pine roots and knots which the spearers dropped last spring, and which the floods have washed up. Get a heaping bushel-basketful. The thin, trembling sheets of imperfectly cemented ice or ice-crystals, loosened by the warmth of the day, now go floating down the stream, looking like dark ripples in the twilight and grating against the edges of the firm ice. They completely fill the river where it is bridged with firmer ice below.

I observed a place on the shore where a small circle of the withered grass was feathered white with frost, and, putting down my hand, felt the muskrat's hole in the bank which was concealed to my eye. I often see this, and at woodchuck-holes. Yet you may see the same over the edge of many a hole, however shallow.

At midday (3 P. M.) saw an owl fly from toward the river and alight on Mrs. Richardson's front-yard fence. Got quite near it, and followed it to a rock on the heap of dirt at Collier's cellar. A rather dark brown owl above (with a decided owl head (and eyes), though not very broad), with longitudinal tawny streaks (or the reverse), none transverse, growing lighter down the breast, and at length clear rusty yellowish or cream-

color beneath and about feathered feet. Wings large and long, with a distinct large black spot beneath; bill and claws, I think, black. Saw no ears. Kept turning its head and great black eyes this way and that when it heard me, but appeared not to see me. Saw my shadow better, for I ap[proached] on the sunny side. I am inclined to think it the short-eared owl, though I could see no ears, though it reminded [me] of what I had read of the hawk owl. It was a foot or more long and spread about three feet. Flew somewhat flappingly, yet hawk-like. Went within two or three rods of it.

Walden at sunset.

The twilights, morn and eve, are very clear and light, very glorious and pure, or stained with red, and prolonged, these days. But, now the sun is set, Walden (I am on the east side) is more light than the sky, — a whiteness as of silver plating, while the sky is yellowish in the horizon and a dusky blue above.[1] Though the water is smooth enough, the trees are lengthened dimly one third in the reflection. Is this phenomenon peculiar to this season? Goose Pond now firmly frozen. It had melted since it froze before.

I see there a narrow open channel in the ice, two and a half rods long and six inches wide, leading straight to a muskrat-house by the shore, apparently kept open by them. Snow will soon come, in a measure

[1] The next night but one just like this, a little later. I saw from the peak the entire reflection of large white pines very distinctly against a clear white sky, though the actual tree was completely lost in night against the dark distant hillside.

to restore the equilibrium between night and day by prolonging the twilight.

I was amused by R. W. E.'s telling me that he drove his own calf out of the yard, as it was coming in with the cow, not knowing it to be his own, a drove going by at the time.

Dec. 9. The third (at least) glorious day, clear and not too cold (this morning a leaf frost on the rails a third of an inch long), with peculiarly long and clear cloudless silvery twilights morn and eve, with a stately, withdrawn after-redness.

Above all, deliver me from a city built on the site of a more ancient city, the materials of the one being the ruins of the other. There the dwellings of the living are in the cemeteries of the dead, and the soil is blanched and accursed.

Dec. 10. Another still more glorious day, if possible; Indian-summery even. These are among the finest days in the year, on account of the wholesome bracing coolness and clearness.

Paddled Cheney's boat up Assabet.

Passed in some places between shooting ice-crystals, extending from both sides of the stream. Upon the thinnest black ice-crystals, just cemented, was the appearance of broad fern leaves, or ostrich-plumes, or flat fir trees with branches bent down. The surface was far from even, rather in sharp-edged plaits or folds. The form of the crystals was oftenest that of low, flattish, three-sided pyramids; when the base was very

broad the apex was imperfect, with many irregular rosettes of small and perfect pyramids, the largest with bases equal to two or three inches. All this appeared to advantage only while the ice (one twelfth of an inch thick, perhaps) rested on the black water.

What I write about at home I understand so well, comparatively! and I write with such repose and freedom from exaggeration.

Dec. 11. *Sunday.* P. M. — To Heywood's Pond and up brook.

Almost a complete Indian-summer day, clear and warm. I am without greatcoat. Channing says he saw larks yesterday, a painted tortoise day before yesterday under ice at White Pond, and a ground-robin (?) last week. We find Heywood's Pond frozen five inches thick. There have been some warm suns on it, and it is handsomely marbled. I find, on looking closely, that there is an indistinct and irregular crack or cleavage in the middle of each dark mark, and I have no doubt the marbling is produced thus, *viz.*, the pond, at first all dark, cracks under a change of temperature, it is expanded and cracked in a thousand directions, and at the same time it gradually grows white as the air-bubbles expand, but wherever there is a crack in it, it interferes with the rays of heat, and the ice for a short distance on each side of it retains its original color. The forms into which the ice first cracks under a higher temperature determine the character of the marbling. This pond is bordered on the northeast with much russet sedge (?) grass beneath the bushes,

and the sun, now falling on the ice, seems to slide or glance off into this grass and light it up wonderfully, filling it with yellowish light. This ice being whitened and made partially opaque by heat, while the surface is quite smooth, perhaps from new freezings then, it reflects the surrounding trees, their forms and colors, distinctly like water. The white air-bubbles are the quicksilver on the back of the mirror.

R. W. E. told me that W. H. Channing conjectured that the landscape looked fairer when we turned our heads, because we beheld it with nerves of the eye unused before. Perhaps this reason is worth more for suggestion than explanation. It occurs to me that the reflection of objects in still water is in a similar manner fairer than the substance, and yet we do not employ unused nerves to behold it. Is it not that we let much more light into our eyes, — which in the usual position are shaded by the brows, — in the first case by turning them more to the sky, and in the case of the reflections by having the sky placed under our feet? *i. e.* in both cases we see terrestrial objects with the sky or heavens for a background or field. Accordingly they are not dark and terrene, but lit and elysian.

Saw a mink at Clamshell Hill on ice. They show the back in swimming.

Dec. 15. *Thursday.* Fishing through ice began on Flint's and Fair Haven yesterday. The first fishers succeed best.

9.30 A. M. — Surveying near Strawberry Hill for Smith and Brooks.

In Brooks's barn I saw twenty-two gray squirrel skins freshly tacked up. He said that as many as one hundred and fifty had been killed this fall within a mile of his barn. They had been very numerous. His brother killed sixteen in one day a month ago. There was one alive and loose in the barn, which had made a nest of husks in one corner. It could not get out, but had gnawed in many places. He had had four alive there at once, and they would not go off when they got out. You can get many more gray than red squirrels. The former often run into the ground; a dog trees the latter. October and November are the squirrel months, when the trees are bare of leaves. The red will drive the gray before it. The gray's nest always leaves; the red's grass, fibres of bark, etc. A few years ago he took one bushel and three pecks of shelled walnuts out of a hollow walnut tree, laid up by red squirrels, a dozen of them.

Nagog appears to have been frozen earlier than our ponds.

He had ten live pigeons in a cage under his barn. He used them to attract others in the spring. The reflections from their necks were very beautiful. They made me think of shells cast up on a beach. He placed them in a cage on the bed and could hear them prate at the house.

Are we not all wreckers, contriving that some treasure may be washed up on our beach and we may secure it, and do we not contract the habits of wreckers from the common modes of getting a living?

The turtle doves plagued him, for they were restless

and frightened the pigeons. He saw many white weasels. Said he had seen a blue mink, and from what he said I did not know but he had heard a whooping crane at night.

Looking from my window these bright moonlight nights, the ground being still bare, the whole landscape — fields, road, and roof — has a wintry aspect, as if covered with snow. It is the frost.[1]

Dec. 16. *Friday.* The elms covered with hoar frost, seen in the east against the morning light, are very beautiful. These days, when the earth is still bare and the weather is so warm as to create much vapor by day, are the best for these frost works.

Would you be well, see that you are attuned to each mood of nature.

J. E. Cabot says the *lunxus* is a wolverene.

Some creature has killed ten, at least, of H. Wheeler's doves and left them together in the dove-house. I think it was my short-eared owl, which flew thither.

Dec. 17. While surveying for Daniel Weston in Lincoln to-day, saw a great many — maybe a hundred — silvery-brown cocoons, wrinkled and flattish, on young alders in a meadow, three or four inches long, fastened to the main stem and branches at same time, with dry alder and fragments of fern leaves attached to and partially concealing them; of some great moth.

[1] On the 18th, after rain in morning, there is no frost and no such appearance.

Dec. 18. *Sunday.* P. M. — Clears off cold after rain. Cross Fair Haven Pond at sunset. The western hills, these bordering it, seen through the clear, cold air, have a hard, distinct edge against the sunset sky. The distant hills are impurpled. I have seen but one or two small birds, — chickadees and probably tree sparrows.

Young Weston said that they found, in redeeming a meadow, heaps of chestnuts under the grass, fifteen rods from the trees, without marks of teeth. Probably it was the work of the meadow mice.

Dec. 22. A slight whitening of snow last evening, the second whitening of the winter; just enough to spoil the skating, now ten days old, on the ponds. Walden skimmed over in the widest part, but some acres still open; will probably freeze entirely to-night if this weather holds.

Surveying the last three days. They have not yielded much that I am aware of. All I find is old bound-marks, and the slowness and dullness of farmers reconfirmed. They even complain that I walk too fast for them. Their legs have become stiff from toil. This coarse and hurried outdoor work compels me to live grossly or be inattentive to my diet; that is the worst of it. Like work, like diet; that, I find, is the rule. Left to my chosen pursuits, I should never drink tea nor coffee, nor eat meat. The diet of any class or generation is the natural result of its employment and locality. It is remarkable how unprofitable it is for the most part to talk with farmers. They commonly stand

on their good behavior and attempt to moralize or philosophize in a serious conversation. Sportsmen and loafers are better company. For society a man must not be too *good* or well-disposed, to spoil his natural disposition. The bad are frequently good enough to let you see how bad they are, but the good as frequently endeavor [to] get between you and themselves.

I have dined out five times and tea'd once within a week. Four times there was tea on the dinner-table, always meat, but once baked beans, always pie, but no puddings. I suspect tea has taken the place of cider with farmers. I am reminded of Haydon the painter's experience when he went about painting the nobility. I go about to the houses of the farmers and squires in like manner. This is my portrait-painting, — when I would fain be employed on higher subjects. I have offered myself much more earnestly as a lecturer than a surveyor. Yet I do not get any employment as a lecturer; was not invited to lecture once last winter, and only once (without pay) this winter. But I can get surveying enough, which a hundred others in this county can do as well as I, though it is not boasting much to say that a hundred others in New England cannot lecture as well as I on my themes. But they who do not make the highest demand on you shall rue it. It is because they make a low demand on themselves. All the while that they use only your humbler faculties, your higher unemployed faculties, like an invisible cimetar, are cutting them in twain. Woe be to the generation that lets any higher faculty in its midst go unemployed! That is to deny God and

know him not, and he, accordingly, will know not of them.

P. M.— Got a white spruce [1] for a Christmas-tree for the town out of the spruce swamp opposite J. Farmer's. It is remarkable how few inhabitants of Concord can tell a spruce from a fir, and probably not two a white from a black spruce, unless they are together. The woodchopper, even hereabouts, cuts down several kinds of trees without knowing what they are. Neither do the spruce trees know the villager. The villager does n't know a black spruce tree when he sees it. How slender his relation to the spruce tree! The white has taken refuge in swamps from him. It is nothing but so much evergreen to him. Last night's sprinkling of snow does not now whiten the ground, except that here in the swamp it whitens the ice and already I see the tracks of rabbits on it.

Dec. 24. The rain of yesterday concluded with a whitening of snow last evening, the third thus far. To-day is cold and quite windy.

P. M. — To the field in Lincoln which I surveyed for Weston the 17th.

Walden almost entirely open again. Skated across Flint's Pond; for the most part smooth but with rough spots where the rain had not melted the snow. From the hill beyond I get an arctic view northwest. The

[1] [" White " is crossed out and " black " written over it, evidently at a later date. In view of Thoreau's confusion of the two spruces for so many years, the next sentence may be thought amusing.]

mountains are of a cold slate-color. It is as if they bounded the continent toward Behring's Straits.

In Weston's field, in springy land on the edge of a swamp, I counted thirty-three or four of those large silvery-brown cocoons within a rod or two, and probably there are many more about a foot from the ground, commonly on the main stem — though sometimes on a branch close to the stem — of the alder, sweet-fern, brake, etc., etc. The largest are four inches long by two and a half, bag-shaped and wrinkled and partly concealed by dry leaves, — alder, ferns, etc., — attached as if sprinkled over them. This evidence of cunning in so humble a creature is affecting, for I am not ready to refer it to an intelligence which the creature does not share, as much as we do the prerogatives of reason. This radiation of the brain. The bare silvery cocoons would otherwise be too obvious. The worm has evidently said to itself: "Man or some other creature may come by and see my casket. I will disguise it, will hang a screen before it." Brake and sweet-fern and alder leaves are not only loosely sprinkled over it and dangling from it, but often, as it were, pasted close upon and almost incorporated into it.

Saw Therien yesterday afternoon chopping for Jacob Baker in the rain. I heard his axe half a mile off, and also saw the smoke of his fire, which I mistook for a part of the mist which was drifting about. I asked him where he boarded. At Shannon's. He asked the price of board and said I was a *grass* boarder, *i. e.* not a regular one. Asked him what time he started in the morning. The sun was up when he got out of the house that

morning. He heard Flint's Pond whooping like cannon the moment he opened the door, but sometimes he could see stars after he got to his chopping-ground. He was working with his coat off in the rain. He said he often saw gray squirrels running about and jumping from tree to tree. There was a large nest of leaves close by. That morning he saw a large bird of some kind. He took a French paper to keep himself in practice, — not for news; he said he did n't want news. He had got twenty-three or twenty-four of them, had got them bound and paid a dollar for it, and would like to have me see it. He had n't read it half; there was a great deal of reading in it, by gorry. He wanted me to tell him the meaning of some of the hard words. How much had he cut? He was n't a-going to kill himself. He had got money enough. He cut enough to earn his board.[1] A man could not do much more in the winter. He used the dry twigs on the trees to start his fire with, and some shavings which he brought in his pocket. He frequently found some fire still in the morning. He laid his axe by a log and placed another log the other side of it. I said he might have to dig it out of a snow-drift, but he thought it would not snow. Described a large hawk killed at Smith's (which had eaten some hens); its legs "as yellow as a sovereign;" apparently a goshawk. He has also his beetle and wedges and whetstone.

In the town hall this evening, my white spruce tree,[2] one of the small ones in the swamp, hardly a quarter the size of the largest, looked double its size, and

[1] [*Walden*, p. 161; Riv. 226.] [2] [See p. 22.]

its top had been cut off for want of room. It was lit with candles, but the starlit sky is far more splendid to-night than any saloon.

Dec. 25. P. M. — Skated to Fair Haven and above.

At seven this morning the water had already oozed out at the sides of the river and flowed over the ice. It appears to be the result of this bridging of the river in the night and so obstructing the channel or usual outlet.

About 4 P. M. the sun sunk behind a cloud, and the pond began to boom or whoop. I noticed the same yesterday at the same hour at Flint's. It was perfectly silent before. The weather in both cases clear, cold, and windy. It is a sort of belching, and, as C. said, is somewhat frog-like. I suspect it did not continue to whoop long either night. It is a very pleasing phenomenon, so dependent on the altitude of the sun.

When I go to Boston, I go naturally straight through the city down to the end of Long Wharf and look off, for I have no cousins in the back alleys. The water and the vessels are novel and interesting. What are our maritime cities but the shops and dwellings of merchants, about a wharf projecting into the sea, where there is a convenient harbor, on which to land the produce of other climes and at which to load the exports of our own? Next in interest to me is the market where the produce of our own country is collected. Boston, New York, Philadelphia, Charleston, New Orleans, and many others are the names of wharves projecting into the sea. They are good places to take in and to

discharge a cargo. Everybody in Boston lives at No. so-and-so, Long Wharf. I see a great many barrels and fig-drums and piles of wood for umbrella-sticks and blocks of granite and ice, etc., and that is Boston. Great piles of goods and the means of packing and conveying them, much wrapping-paper and twine, many crates and hogsheads and trucks, that is Boston. The more barrels, the more Boston. The museums and scientific societies and libraries are accidentals. They gather around the barrels, to save carting.[1]

Apparently the ice is held down on the sides of the river by being frozen to the shore and the weeds, and so is overflowed there, but in the middle it is lifted up and makes room for the tide. I saw, just above Fair Haven Pond, two or three places where, just before the last freezing, when the ice was softened and partly covered with sleet, there had been a narrow canal, about eight inches wide, quite across the river from meadow to meadow. I am constrained to believe, from the peculiar character of it on the meadow end, where in one case it divided and crossed itself, that it was made either by muskrats or otters or minks repeatedly crossing there. One end was for some distance like an otter trail in the soft upper part of the ice, not worn through.

Dec. 26. Monday. This forenoon it snowed pretty hard for some hours, the first snow of any consequence thus far. It is about three inches deep. I go out at 2.30, just as it ceases. Now is the time, before the

[1] [*Cape Cod*, p. 268; Riv. 324, 325.]

wind rises or the sun has shone, to go forth and see the snow on the trees. The clouds have lifted somewhat, but are still spitting snow a little. The vapor of the steam-engine does not rise high in the misty air. I go around Walden *via* the almshouse. The branches of deciduous trees, — oaks and maples, etc., — especially the gray oaks of Hubbard's Close on the side-hill, support long lightning-like arms of snow, many times their own thickness. It has fallen so gently that it forms an upright wall on the slenderest twig. The agreeable maze which the branches make is more obvious than ever. And every twig thus laden is as still as the hillside itself. The pitch pines are covered with rich globular masses. The effect of the snow is to press down the forest, confound it with the grasses, and create a new surface to the earth above, shutting us in with it, and we go along somewhat like moles through our galleries. The sight of the pure and trackless road up Brister's Hill, with branches and trees supporting snowy burdens bending over it on each side, would tempt us to begin life again. The ice is covered up, and skating gone. The bare hills are so white that I cannot see their outlines against the misty sky. The snow lies handsomely on the shrub oaks, like a coarse braiding in the air. They have so many small and zigzag twigs that it comes near to filling up with a light snow to that depth. The hunters are already out with dogs to follow the first beast that makes a track.

Saw a small flock of tree sparrows in the sprout-lands under Bartlett's Cliff. Their metallic chip is much like the lisp of the chickadee. All weeds, with

their seeds, rising dark above the snow, are now remarkably conspicuous, which before were not observed against the dark earth.

I passed by the pitch pine that was struck by lightning. I was impressed with awe on looking up and seeing that broad, distinct spiral mark, more distinct even than when made eight years ago, as one might groove a walking-stick, — mark of an invisible and intangible power, a thunderbolt, mark where a terrific and resistless bolt came down from heaven, out of the harmless sky, eight years ago. It seemed a sacred spot. I felt that we had not learned much since the days of Tullus Hostilius. It at length shows the effect of the shock, and the woodpeckers have begun to bore it on one side.

Walden still open. Saw in it a small diver, probably a grebe or dobchick, dipper, or what-not, with the markings, as far as I saw, of the crested grebe, but smaller. It had a black head, a white ring about its neck, a white breast, black back, and apparently no tail. It dove and swam a few rods under water, and, when on the surface, kept turning round and round warily and nodding its head the while. This being the only pond hereabouts that is open.

Was overtaken by an Irishman seeking work. I asked him if he could chop wood. He said he was not long in this country; that he could cut one side of a tree well enough, but he had not learned to change hands and cut the other without going around it, — what we call crossing the carf. They get very small wages at this season of the year; almost give up the

ghost in the effort to keep soul and body together. He left me on the run to find a new master.

Dec. 27. High wind with more snow in the night. The snow is damp and covers the panes, darkening the room. At first I did not know that more snow had fallen, it was so drifted. Snowy ridges cross the village street and make it look as wild and bleak as a pass of the Rocky Mountains or the Sierra Nevada.

P. M. — To Fair Haven Pond up meadows and river. The snow blows like spray, fifteen feet high, across the fields, while the wind roars in the trees as in the rigging of a vessel. It is altogether like the ocean in a storm. The snow blowing over the ice is like a vapor rising or curling from a roof. Most plowed fields are quite bare, but I am surprised to find behind the walls on the south side, like a skulking company of rangers in ambuscade or regular troops that have retreated to another parallel, a solid column of snow six or eight feet deep. The wind, eddying through and over the wall, is scooping it out in fantastic forms, — shells and troughs and glyphs of all kinds. Sometimes the drift is pierced with many holes as big as one's fist, where the fine snow-drift is passing through like steam. As it flows over, it builds out eaves to the bank of razor sharpness.

It is surprising what things the snow betrays. I had not seen a meadow mouse all summer, but no sooner does the snow come and spread its mantle over the earth than it is printed with the tracks of countless mice and larger animals. I see where the mouse has dived into

a little hole in the snow, not larger than my thumb, by the side of a weed, and a yard further reappeared again, and so on alternately above and beneath. A snug life it lives. The crows come nearer to the houses, alight on trees by the roadside, apparently being put to it for food. I saw them yesterday also.

The wind has now shaken the snow from the trees, and it lies in irregular little heaps on the snow beneath, except that there is a white ridge up and down their trunks on the northwest side, showing which side the storm came from, which, better than the moss, would enable one to find his way in the night. I went to hear the pond whoop, but did not hear much. I look far, but see no rainbow flocks in the sky. It is a true winter sunset, almost cloudless, clear, cold indigo-y along the horizon. The evening (?) star is seen shining brightly, before the twilight has begun. A rosy tint suffuses the eastern horizon. The outline of the mountains is wonderfully distinct and hard, and they are a dark blue and very near. Wachusett looks like a right whale over our bow, plowing the continent, with his flukes well down. He has a vicious look, as if he had a harpoon in him.[1]

I wish that I could buy at the shops some kind of india-rubber that would rub out at once all that in my writing which it now costs me so many perusals, so many months if not years, and so much reluctance, to erase.[2]

Dec. 28. Perhaps the coldest night. The pump is slightly frozen.

[1] [Channing, p. 107.]

[2] [Channing, p. 121.]

I hear and see tree sparrows about the weeds in the garden. They seem to visit the gardens with the earliest snow; or is it that they are more obvious against the white ground? By their sharp silvery chip, perchance, they inform each other of their whereabouts and keep together.

Joe Brown owned those pigs I saw to root up the old pasture behind Paul Adams's. N. Stow tells me this morning that he has sold and brought to the butcher's three loads of pork containing twenty-five hundred pounds each, the least; at eight cents per pound amounting to more than $600.

E. W——, who got the premium on farms this year, keeps twenty-eight cows, which are milked before breakfast, or 6 o'clock, his hired men rising at 4.30 A. M.; but he gives them none of the milk in their coffee.

I noticed the other day that the ice on the river and pond was cracked very coarsely, and lay in different planes a rod or two in diameter. It being very smooth and the light differently reflected from the different surfaces, this arrangement was very obvious. In one place where the river was open yesterday, the water, tossed into waves, looked exceedingly dark and angry.

Dec. 29. We survive, in one sense, in our posterity and in the continuance of our race, but when a race of men, of Indians for instance, becomes extinct, is not that the end of the world for them? Is not the world forever beginning and coming to an end, both to men and races? Suppose we were to foresee that the Saxon race to which we belong would become extinct the

present winter, — disappear from the face of the earth, — would it not look to us like the end, the dissolution of the world? Such is the prospect of the Indians.

All day a driving snow-storm, imprisoning most, stopping the cars, blocking up the roads. No school to-day. I cannot see a house fifty rods off from my window through [it];[1] yet in midst of all I see a bird, probably a tree sparrow, partly blown, partly flying, over the house to alight in a field. The snow penetrates through the smallest crevices under doors and side of windows.

P. M. — Tried my snow-shoes. They sink deeper than I expected, and I throw the snow upon my back. When I returned, twenty minutes after, my great tracks were not to be seen. It is the worst snow-storm to bear that I remember. The strong wind from the north blows the snow almost horizontally, and, beside freezing you, almost takes your breath away. The driving snow blinds you, and where you are protected, you can see but little way, it is so thick. Yet in spite, or on account, of all, I see the first flock of arctic snowbirds (*Emberiza nivalis*) near the depot, white and black, with a sharp, whistle-like note. An hour after I discovered half a pint of snow in each pocket of my greatcoat.

What a contrast between the village street now and last summer! The leafy elms then resounding with the warbling vireo, robins, bluebirds, and the fiery hang-bird, etc., to which the villagers, kept indoors by the heat, listen through open lattices. Now it is like a street in Nova Zembla, — if they were to have any there. I

[1] In an ordinary snow-storm, when snowing fast, Jan. 1st, '54, I can see E. Wood's house, or about a mile.

wade to the post-office as solitary a traveller as ordinarily in a wood-path in winter. The snow is mid-leg deep, while drifts as high as one's head are heaped against the houses and fences, and here and there range across the street like snowy mountains. You descend from this, relieved, into capacious valleys with a harder bottom, or more fordable. The track of one large sleigh alone is visible, nearly snowed up. There is not a track leading from any door to indicate that the inhabitants have been forth to-day, any more than there is track of any quadruped by the wood-paths. It is all pure untrodden snow, banked up against the houses now at 4 P. M., and no evidence that a villager has been abroad to-day. In one place the drift covers the front-yard fence and stretches thence upward to the top of the front door, shutting all in, and frequently the snow lies banked up three or four feet high against the front doors, and the windows are all snowed up, and there is a drift over each window, and the clapboards are all hoary with it. It is as if the inhabitants were all frozen to death, and now you threaded the desolate streets weeks after that calamity. There is not a sleigh or vehicle of any kind on the Mill-Dam, but one saddled horse on which a farmer has come into town. The cars are nowhere. Yet they are warmer, merrier than ever there within. At the post-office they ask each traveller news of the cars, — "Is there any train up or down?" — or how deep the snow is on a level.

Of the snow bunting, Wilson says that they appear in the northern parts of the United States "early in December, or with the first heavy snow, particularly if

drifted by high winds." This day answers to that description exactly. The wind is northerly. He adds that "they are . . . universally considered as the harbingers of severe cold weather." They come down from the extreme north and are common to the two continents; quotes Pennant as saying that they "inhabit not only Greenland but even the dreadful climate of Spitzbergen, where vegetation is nearly extinct, and scarcely any but *cryptogamous* plants are found. It therefore excites wonder, how birds, which are graminivorous in every other than those frost-bound regions, subsist: yet are there found in great flocks both on the land and ice of Spitzbergen." P. also says that they inhabit in summer "the most naked Lapland Alps," and "descend in rigorous seasons into Sweden, and fill the roads and fields; on which account" the Uplanders call them "*hardwarsfogel*," hard-weather birds. Also P. says "they overflow [in winter] the more southern countries in amazing multitudes." W. says their colors are very variable, "and the whiteness of their plumage is observed to be greatest towards the depth of winter." Also W. says truly that they seldom sit long, "being a roving restless bird." Peabody says that in summer they are "pure white and black," but are not seen of that color here. Those I saw to-day were of that color, behind A. Wheeler's. He says they are white and rusty-brown here.

These are the true winter birds for you, these winged snowballs. I could hardly see them, the air was so full of driving snow. What hardy creatures! Where do they spend the night?

The woodchopper goes not to the wood to-day. His axe and beetle and wedges and whetstone he will find buried deep under a drift, perchance, and his fire all extinguished.

As you go down the street, you see on either hand, where erst were front yards with their parterres, rolling pastures of snow, unspotted blankness swelling into drifts. All along the path lies a huge barrow of snow raised by the arctic mound-builder. It is like a pass through the Wind River Mountains or the Sierra Nevada, — a spotless expanse of drifted snow, sloping upward over fences to the houses, deep banks all along their fronts closing the doors. It lies in and before Holbrook's piazza, dwarfing its columns, like the sand about Egyptian temples.

The windows are all sealed up, so that the traveller sees no face of inhabitant looking out upon him. The housekeeper thinks with pleasure or pain of what he has in his larder. No shovel is put to the snow this day. To-morrow we shall see them digging out. The farmer considers how much pork he has in his barrel, how much meal in his bin, how much wood in his shed. Each family, perchance, sends forth one representative before night, who makes his way with difficulty to the grocery or post-office to learn the news; *i. e.*, to hear what others say to it, who can give the best account of it, best can name it, has waded farthest in it, has been farthest out and can tell the biggest and most adequate story; and hastens back with the news.

I asked Therien yesterday if he was satisfied with himself. I was trying to get a *point d'appui* within

him, a shelf to spring an arch from, to suggest some employment and aim for life. "Satisfied!" said he; "some men are satisfied with one thing, and some with another, by George. One man, perhaps, if he has got enough, will be satisfied to sit all day with his back to the fire and his belly to the table; that will satisfy him, by gorry." When I met him the other day, he asked me if I had made any improvement. Yet I could never by any manœuvring get him to take what is called a spiritual view of things, of life. He allowed that study and education was a good thing, but for him it was too late. He only thought of its expediency; nothing answering to what many call their aspirations. He was humble, if he can be called humble who never aspires.[1]

He cut his trees very low, close to the ground, because the sprouts that came from such stumps were better.[2] Perhaps he distinguished between the red and scarlet oak; one had a pale inner bark, the other a darker or more reddish one. Without the least effort he could defend prevailing institutions which affected him, better than any philosopher, because he implicitly accepted them and knew their whole value. He gave the true reason for their prevalence, because speculation had never suggested to him any other. Looking round among the trees, he said he could enjoy himself in the woods chopping alone in a winter day; he wanted no better sport.[3] The trees were frozen, — had been sometimes, — but would frequently thaw again during the day. Split easier for it, but did not chop better.

[1] [*Walden*, pp. 163, 165, 166; Riv. 229, 233.]

[2] [*Walden*, p. 161; Riv. 227.] [3] [*Walden*, p. 162; Riv. 228.]

The woodchopper to-day is the same man that Homer refers to, and his work the same. He, no doubt, had his beetle and wedge and whetstone then, carried his dinner in a pail or basket, and his liquor in a bottle, and caught his woodchucks, and cut and corded, the same.

The thoughts and associations of summer and autumn are now as completely departed from our minds as the leaves are blown from the trees. Some withered deciduous ones are left to rustle, and our cold immortal evergreens. Some lichenous thoughts still adhere to us.

Dec. 30. P. M. — Around Walden.

The pond not yet frozen entirely over; about six acres open, the wind blew so hard last night. I carried a two-foot rule and measured the snow of yesterday in Abiel Wheeler's wood by the railroad, near the pond. In going a quarter of a mile it varied from fourteen to twenty-four inches. Then went to Potter's wood, by Lincoln road, near Lincoln line, and paced straight through a level wood where there was no drift perceptible, measuring at every ten paces for two hundred paces, and the average was twenty and one half inches.

I see the tracks of mice, and squirrels, probably gray ones, leading straight to or from the feet of the largest pines and oaks, which they had plainly ascended. Their tracks commonly show rapidity of motion. I saw in some places a continuous trail, sometimes disappearing in the snow, between a muskrat's track and a mole's gallery, three or more inches wide. Was it a red squirrel? I think it too large.[1]

[1] A gray squirrel's. *Vide* [p. 41].

The storm being from the north, the snow is deepest just over the ridge on the south side of rising grounds, as well as houses and fences. When it has passed the ridge of the hill there is a lull and it falls, just as it is deposited behind walls because the wind does not blow there, — carries it no further.

In winter even man is to a slight extent dormant, just as some animals are but partially awake, though not commonly classed with those that hibernate. The summer circulations are to some extent stopped; the range of his afternoon walk is somewhat narrower; he is more or less confined to the highway and wood-path; the weather oftener shuts him up in his burrow; he begins to feel the access of dormancy and to assume the spherical form of the marmot; the nights are longest; he is often satisfied if he only gets out to the post-office in the course of the day. The arctic voyagers are obliged to invent and willfully engage in active amusements to keep themselves awake and alive. Most men do not now extend their walks beyond the village street. Even our experience is something like wintering in the pack.

Dec. 31. Four more inches of snow fell last night, making in all now two feet on a level.

P. M. — Down railroad to Walden and circle round to right, through Wheeler's woods out to railroad again.

It is a remarkable sight, this snow-clad landscape, with the fences and bushes half buried and the warm sun on it. The snow lies not quite level in the fields,

but in low waves with an abrupt edge on the north or wind side, as it lodges on ice.

The town and country are now so still, there being no rattle of wagons nor even jingle of sleigh-bells, every tread being as with woolen feet, I hear very distinctly from the railroad causeway the whistle of the locomotive on the Lowell road. For the same reason, in such a day as this the crowing of a cock is heard very far and distinctly. I frequently mistake at first a very distant whistle for the higher tones of the telegraph harp by my side. The telegraph and railroad are closely allied, and it is fit and to be expected that at a little distance their music should be the same. There are a few sounds still which never fail to affect me. The notes of the wood thrush and the sound of a vibrating chord, these affect me as many sounds once did often, and as almost all should. The strains of the æolian harp and of the wood thrush are the truest and loftiest preachers that I know now left on this earth. I know of no missionaries to us heathen comparable to them. They, as it were, lift us up in spite of ourselves. They intoxicate, they charm us. Where was that strain mixed into which this world was dropped but as a lump of sugar to sweeten the draught? I would be drunk, drunk, drunk, dead drunk to this world with it forever. He that hath ears, let him hear. The contact of sound with a human ear whose hearing is pure and unimpaired is coincident with an ecstasy. Sugar is not so sweet to the palate, as sound to the healthy ear;[1] the hearing of it makes men brave.

[1] [Channing, p. 78.]

(How can a poet afford to keep an account with a bookseller?) These things alone remind me of my immortality, which is else a fable. I hear it, and I realize and see clearly what at other times I only dimly remember. I get the value of the earth's extent and the sky's depth. It, as it were, takes me out of my body and gives me the freedom of all bodies and all nature. I leave my body in a trance and accompany the zephyr and the fragrance.

Walden froze completely over last night. It is, however, all snow ice, as it froze while it was snowing hard, and it looks like frozen yeast somewhat. I waded about in the woods through the snow, which certainly averaged considerably more than two feet deep where I went. It stuck to my clothes and melted, and so was more inconvenient than yesterday. Saw probably an otter's track, very broad and deep, as if a log had been drawn along. It was nearly as obvious as a man's track. It was made before last night's snow fell. The creature from time to time went beneath the snow for a few feet, to the leaves. This animal probably I should never see the least trace of, were it not for the snow, the great revealer.

I saw some squirrels' nests of oak leaves high in the trees, and, directly after, a gray squirrel tripping along the branches of an oak and shaking down the snow. It ran down the oak on the opposite side to me, over the snow and up another tall and slender oak, also on the side opposite to me, which was bare, and leapt down about four feet into a white pine, and then ran up still higher into its thick green top,

and clung behind the main stem, perfectly still, and thought itself concealed. This it did to conceal itself, though obliged to come nearer to me to accomplish it. Its fore[1] feet make but one track in the snow, about three inches broad, and its hind feet (?) another similar one,[2] a foot or more distant, and there are two sharp furrows forward and two slighter backward from each track where it has scratched along. This track it makes when running, but I am not absolutely certain that the whole four feet do not come together. There were many holes in the snow where it had gone down to the leaves and brought up acorns, which it had eaten on the nearest twig, dropping fine bits of the shell about on the snow, and also bits of lichen and of bark. I noticed the bits of acorn-shells, etc., by the holes in many places. Sometimes it made a continuous narrow trail in the snow, *somewhat* like a small musk-rat, where it had walked, or gone, several times, and it would go under a few feet and come out again.

The birds I saw were a partridge, perched on an evergreen, apparently on account of the deep snow, heard a jay, and heard and saw together white-bellied nuthatches and chickadees, the former uttering a faint *quank quank* and making a loud tapping, and the latter its usual lisping note.

[1] Four?

[2] [An interrogation-point in parenthesis is marked here in pencil.]

II

JANUARY, 1854

(ÆT. 36)

Jan. 1. Le Jeune, describing the death of a young Frenchwoman who had devoted her life to the savages of Canada, uses the expression: "Finally this beautiful soul detached itself from its body the 15th of March," etc.

The drifts mark the standstill or equilibrium between the currents of air or particular winds. In our greatest snow-storms, the wind being northerly, the greatest drifts are on the south sides of the houses and fences and accordingly on the left-hand side of the street going down it. The north track of the railroad was not open till a day or more later than the south. I notice that in the angle made by our house and shed, a southwest exposure, the snow-drift does not lie close about the pump, but is a foot off, forming a circular bowl, showing that there was an eddy about it. It shows where the wind has been, the form of the wind. The snow is like a mould, showing the form of the eddying currents of air which have been impressed on it, while the drift and all the rest is that which fell between the currents or where they counterbalanced each other. These boundary lines are mountain barriers.

The white-in-tails, or grass finches, linger pretty late, flitting in flocks before, but they come so near winter

only as the white in their tails indicates. They let it come near enough to whiten their tails, perchance, and they are off. The snow buntings and the tree sparrows are the true spirits of the snow-storm; they are the animated beings that ride upon it and have their life in it.

The snow is the great betrayer. It not only shows the tracks of mice, otters, etc., etc., which else we should rarely if ever see, but the tree sparrows are more plainly seen against its white ground, and they in turn are attracted by the dark weeds which it reveals. It also drives the crows and other birds out of the woods to the villages for food. We might expect to find in the snow the footprint of a life superior to our own, of which no zoölogy takes cognizance. Is there no trace of a nobler life than that of an otter or an escaped convict to be looked for in the snow? Shall we suppose that that is the only life that has been abroad in the night? It is only the savage that can see the track of no higher life than an otter. Why do the vast snow plains give us pleasure, the twilight of the bent and half-buried woods? Is not all there consonant with virtue, justice, purity, courage, magnanimity? Are we not cheered by the sight? And does not all this amount to the track of a higher life than the otter's, a life which has not gone by and left a footprint merely,[1] but is there with its beauty, its music, its perfume, its sweetness, to exhilarate and recreate us? Where there is a perfect government of the world according to the highest laws, is there no trace of intelligence there, whether in the snow or the earth, or in ourselves? No other trail but such

[1] But all that we see is the impress of its spirit.

as a dog can smell? Is there none which an angel can detect and follow? None to guide a man on his pilgrimage, which water will not conceal? Is there no odor of sanctity to be perceived? Is its trail too old? Have mortals lost the scent? The great game for mighty hunters as soon as the first snow falls is Purity, for, earlier than any rabbit or fox, it is abroad, and its trail may be detected by curs of lowest degree. Did this great snow come to reveal the track merely of some timorous hare, or of the Great Hare, whose track no hunter has seen? Is there no trace nor suggestion of Purity to be detected? If one could detect the meaning of the snow, would he not be on the trail of some higher life that has been abroad in the night? Are there not hunters who seek for something higher than foxes, with judgment more discriminating than the senses of fox-hounds, who rally to a nobler music than that of the hunting-horn? As there is contention among the fishermen who shall be the first to reach the pond as soon as the ice will bear, in spite of the cold, as the hunters are forward to take the field as soon as the first snow has fallen, so the observer, or he who would make the most of his life for discipline, must be abroad early and late, in spite of cold and wet, in pursuit of nobler game, whose traces are then most distinct. A life which, pursued, does not earth itself, does not burrow downward but upward, which takes not to the trees but to the heavens as its home, which the hunter pursues with winged thoughts and aspirations, — these the dogs that tree it, — rallying his pack with the bugle notes of undying faith, and returns with some worthier trophy than

a fox's tail, a life which we seek, not to destroy it, but to save our own. Is the great snow of use to the hunter only, and not to the saint, or him who is earnestly building up a life? Do the Indian and hunter only need snow-shoes, while the saint sits indoors in embroidered slippers?

The Indians might have imagined a large snow bunting to be the genius of the storm.

This morning it is snowing again fast, and about six inches has already fallen by 10 A. M., of a moist and heavy snow. It is about six inches in all this day. This would [be] two feet and a half in all, if it has not settled, — but it has.

I would fain be a fisherman, hunter, farmer, preacher, etc., but fish, hunt, farm, preach other things than usual.

When, in 1641, the five hundred Iroquois in force brought to Three Rivers two French prisoners (whom they had taken), seeking peace with the French, — I believe this preceded any war with them, — at the assembling for this purpose, they went through the form of tying their prisoners, that they might pass for such; then, after a speech, they broke their bonds and cast them into the river that it might carry them so far that they might never be remembered. The speaker "then made many presents, according to the custom of the country where the word for presents is speech (*où le mot de présens se nomme parole*), to signify that the present speaks more strongly than the mouth." (Le Jeune.)

Our orators might learn much from the Indians.

They are remarkable for their precision; nothing is left at loose ends. They address more senses than one, so as to preclude misunderstanding. A present accompanies each proposition. In delivering one present, the speaker said, " This is the house which we shall have at Three Rivers when we come here to treat with you," etc. This is in Paul Le Jeune's Relation for '40 and '41, page 156.

Jan. 2. The trees are white with a hoar frost this morning, small leafets, a tenth of an inch long, on every side of the twigs. They look like ghosts of trees. Took a walk on snow-shoes at 9 A. M. to Hubbard's Grove. A flock of snow buntings flew over the fields with a rippling whistle, accompanied sometimes by a tender peep and a ricochet motion.

P. M. — Up Union Turnpike.

The tints of the sunset sky are never purer and more ethereal than in the coldest winter days. This evening, though the colors are not brilliant, the sky is crystalline and the pale fawn-tinged clouds are very beautiful. I wish to get on to a hill to look down on the winter landscape. We go about these days as if we had fetters on our feet. We walk in the stocks, stepping into the holes made by our predecessors.

I noticed yesterday that the damp snow, falling gently without wind on the top of front-yard posts, had quite changed the style of their architecture, — to the dome style of the East, a four-sided base becoming a dome at top. I observe other revelations made by the snow. The team and driver have long since gone by, but I

see the marks of his whip-lash on the snow, — its recoil, — but alas! these are not a complete tally of the strokes which fell upon the oxen's back. The unmerciful driver thought perchance that no one saw him, but unwittingly he recorded each blow on the unspotted snow behind his back as in the book of life. To more searching eyes the marks of his lash are in the air.

I paced partly through the pitch pine wood and partly the open field from the Turnpike by the Lee place to the railroad, from north to south, more than a quarter of a mile, measuring at every tenth pace. The average of sixty-five measurements, up hill and down, was nineteen inches; this after increasing those in the woods by one inch each (little enough) on account of the snow on the pines. So that, apparently, it has settled about as much as the two last snows amount to. I think there has been but little over two feet at any one time. I think that one would have to pace a mile on a north and south line, up and down hill, through woods and fields, to get a quite reliable result. The snow will drift sometimes the whole width of a field, and fill a road or valley beyond. So that it would be well that your measuring included several such driftings. There is very little reliance to [be] put on the usual estimates of the depth of snow. I have heard different men set this snow at six, fifteen, eighteen, twenty-four, thirty-six, and forty-eight inches. My snow-shoes sank about four inches into the snow this morning, but more than twice as much the 29th.

On north side the railroad, above the red house crossing, the cars have cut through a drift about a quarter

of a mile long and seven to nine feet high, straight up and down. It reminds me of the Highlands, the Pictured Rocks, the side of an iceberg, etc. Now that the sun has just sunk below the horizon, it is wonderful what an amount of soft light [it] appears to be absorbing. There appears to be more day just here by its side than anywhere. I can almost see into [it] six inches. It is made translucent, it is so saturated with light.

I have heard of one precious stone found in Concord, the cinnamon stone. A geologist has spoken of it as found in this town, and a farmer has described to me one which he once found, perhaps the same referred to by the other. He said it was as large as a brick, and as thick, and yet you could distinguish a pin through it, it was so transparent. If not a mountain of light, it was a brickbatful, at any rate.

Jan. 3. *Tuesday.* It is now fairly winter. We have passed the line, have put the autumn behind us, have forgotten what these withered herbs that rise above the snow here and there are, what flowers they ever bore. They are fishing on Walden this P. M. The fisherman gets fifteen or twenty pounds thus, when he has pretty good luck. Two to three pounds is a common size there. From the Peak, I looked over the wintry landscape. First there is the white ground, then the dark, dulled green of evergreens, then the reddish (?) brown or leather-color of the oaks, which generally retain their leaves, then the gray of maples and other trees, which are bare. They are modest Quaker colors that are seen above the snow. The twilight appears to

linger in the snow. This it is makes the days seem suddenly longer. The sun has set, shorn of its disk [*sic*] in dun, red clouds. The young moon and the evening star are seen. The partridge has come forth to bud on some wayside apple tree. The woodchopper's task is done; he puts his axe under a log and sets out for home. For an hour the fisherman's lines have been freezing in, and now he, too, has commenced his retreat. That large round track forming nearly a straight line Goodwin thinks a fox.

A thaw appears to be commencing. We hear the eaves run in the evening.

Jan. 4. It thaws all day; the eaves drip as in a rain; the road begins to be soft and a little sloshy.

Jan. 5. Still thaws. This afternoon (as probably yesterday), it being warm and thawing, though fair, the snow is covered with snow-fleas. Especially they are sprinkled like pepper for half a mile in the tracks of a woodchopper in deep snow. These are the first since the snow came. With the first thawing weather they are [*sic*]. There is also some blueness now in the snow, the heavens being now (toward night) overcast. The blueness is more distinct after sunset.

Jan. 6. Walked Tappan[1] in P. M. down railroad to Heywood Brook, Fair Haven, and Cliffs.

At every post along the brook-side, and under almost every white pine, the snow strewn with the scales and

[1] [Doubtless William Tappan, of New York. See *Familiar Letters.*]

seeds of white pine cones left by the squirrels. They have sat on every *post* and dropped them for a great distance, also acorn-shells. The surface of the snow was sometimes strewn with the small alder scales, *i. e.* of catkins; also, here and there, the large glaucous lichens (cetrarias?). Showed Tappan a small shad-bush, which interested him and reminded him of a greyhound, rising so slender and graceful with its narrow buds above the snow. To return to the squirrels, I saw where they had laid up a pitch pine cone in the fork of a rider in several places. Many marks of partridges, and disturbed them on evergreens. A winter (?) gnat out on the bark of a pine. On Fair Haven we slumped nearly a foot to the old ice. The partridges were budding on the Fair Haven orchard, and flew for refuge to the wood, twenty minutes or more after sundown. There was a low, narrow, clear segment of sky in the west at sunset, or just after (all the rest overcast), of the coppery yellow, perhaps, of some of Gilpin's pictures, all spotted coarsely with clouds like a leopard's skin. I took up snow in the tracks at dark, but could find no fleas in it then, though they were exceedingly abundant before. Do they go into the snow at night? Frequently see a spider apparently stiff and dead on snow.

In Vimont's Jesuit Relation for 1642, he describes the customs of the Iroquois. As in the case of the Hurons, everything is done by presents. The murderer and robber are restrained by the very defect of justice, and because the community (his relations or tribe) whips itself for his fault. They must appease the in-

jured with costly presents. They make that he shall involve his friends in ruin along with himself, and if he would injure any one, shall injure them too. By making it impossible for him to do an injury without doing a greater injury than he wishes, they restrain him.

Jan. 7. Saturday. Thaw ended. Cold last night; rough walking; snow crusted.

P. M. — To Ministerial Swamp.

The bare larch trees there, so slender and tall, where they grow close together, all beaded or studded with buds, or rather stubs, which look like the dry sterile blossoms. How much fuller, or denser and more flourishing, in winter is the white spruce than the white pine! It has two hues, I believe, the glaucous or bluish and the green, melting into each other. It has not shed all its seeds yet. Now that the snow has lain more than a week, it begins to be spotted and darkened in the woods, with various dry leaves and scales from the trees. The wind and thaw have brought down a fresh crop of dry pine and spruce needles. The little roundish and stemmed scales of the alder catkins spot it thickly. The bird-shaped scales of the white birch are blown more than twenty rods from the trees. I see also the wings of pine seeds, — the seed being gone, — which look exactly like the wings of ants. Also, in the pastures, the fine star-shaped fuzz of the gray goldenrod, somewhat like a spider with many legs.

The snow is still very deep in the more open parts of the swamp, where it is light, being held up by the

bushes; but in thick woods there is much less of it, beside that it has settled far more. There is also much more in sprout-lands than in woods. Is it that the ground not being frozen in the woods melts it so much faster, while in the swamp, even if the ground is equally warm, the snow, lying light, does not come in contact with it enough to melt it?

The ice has all been snow ice of late, not interesting to study. However, there are now some little pools over the snow in hollows frozen, where the thin ice is yellow and full of white bubbles and like small coins. Is this the melted snow made into tea by running amid the dead leaves and grass? I see the muddy, dripping tracks of [a] muskrat or mink that has come out of a ditch on to the snow here in the swamp. Saw a fat pitch pine stump, whose sap, four inches thick, has long been gone, but the scales of the thick bark still form a circle level with the ground four inches from the (solid or fat) wood on every side. I see at Martial Miles's house where many hundred bees lie dead on the snow close to their hives, plainly having come out during the late warmer days.

I went to these woods partly to hear an owl, but did not; but, now that I have left them nearly a mile behind, I hear one distinctly, *hoorer hoo*. Strange that we should hear this sound so often, loud and far, — a voice which we call the owl, — and yet so rarely see the bird. Oftenest at twilight. It has a singular prominence as a sound; is louder than the voice of a dear friend. Yet we see the friend perhaps daily and the owl but few times in our lives. It is a sound which

the wood or the horizon makes. I see the cars almost as often as I hear the whistle.

Jan. 8. *Sunday.* Gilpin, in his essay on the "Art of Sketching Landscape," says: "When you have finished your sketch therefore with Indian ink, as far as you propose, tinge the whole over with some light horizon hue. It may be the rosy tint of morning; or the more ruddy one of evening; or it may incline more to a yellowish, or a greyish cast. . . . By washing this tint over your *whole drawing*, you lay a foundation for harmony."

I have often been attracted by this harmonious tint in his and other drawings, and sometimes, especially, have observed it in nature when at sunset I inverted my head. We love not so well the landscape represented as in broad noon, but in a morning or evening twilight, those seasons when the imagination is most active, the more hopeful or pensive seasons of the day. Our mood may then possess the whole landscape, or be in harmony with it, as the hue of twilight prevails over the whole scene. Are we more than crepuscular in our intellectual and spiritual life? Have we awakened to broad noon? The morning hope is soon lost in what becomes the routine of the day, and we do not recover ourselves again until we land on the pensive shores of evening, shores which skirt the great western continent of the night. At sunset we look into the west. For centuries our thoughts fish those grand banks that lie before the newfoundland, before our spirits take up their abode in that Hesperian Continent to which these lie in the way.

P. M. — To the Spruce Swamp in front of J. Farmer's.

Can go across both rivers now. New routes are more practicable. Stood within a rod of a downy woodpecker on an apple tree. How curious and exciting the blood-red spot on its hindhead! I ask why it is there, but no answer is rendered by these snow-clad fields. It is so close to the bark I do not see its feet. It looks behind as if it had on a black cassock open behind and showing a white undergarment between the shoulders and down the back. It is briskly and incessantly tapping all round the dead limbs, but rarely twice in a place, as if to sound the tree and so see if it has any worm in it, or perchance to start them. How much he deals with the bark of trees, all his life long tapping and inspecting it! He it is that scatters those fragments of bark and lichens about on the snow at the base of trees. What a lichenist he must be! Or rather, perhaps it is fungi makes his favorite study, for he deals most with dead limbs. How briskly he glides up or drops himself down a limb, creeping round and round, and hopping from limb to limb, and now flitting with a rippling sound of his wings to another tree!

The lower two-thirds of the white spruce has its branches retraced or turned downward, and then curving upward at the extremities, as much as the white pine commonly slants upwards. Above it is so thick that you cannot see through it. All the black spruce that I know hereabouts stand on higher land than this. Saw two squirrel-nests in the thick top of a spruce.

It was a foot in diameter, of coarse grass and bark fibres, with very thick bottom and sides and a scarcely distinguishable entrance, lined with fine fibres of bark, probably inner bark of maple, very warm. Probably a red squirrel's, for I heard one winding up his clock. Many white pine cones had been eaten in the neighborhood.

Gilpin's "Essay on Picturesque Beauty" is the key to all his writings. He says in the outset that he does not mean to inquire "into the general sources of beauty," but the questions which he proposes to himself depend on the result of such an inquiry. He asks, first, "What is that quality in objects, which particularly marks them as picturesque?" and answers "*roughness*," assigning to that kind of beauty which he makes the opposite to the picturesque the quality of "*smoothness*." This last he styles, too generally or exclusively, "the beautiful." The beautiful, he says, cannot be painted; *e. g.*, "A piece of Palladian architecture may be elegant in the last degree. The proportion of its parts — the propriety of its ornaments — and the symmetry of the whole, may be highly pleasing. But if we introduce it in a picture, it immediately becomes a formal object, and ceases to please. Should we wish to give it picturesque beauty, we must use the mallet, instead of the chisel: we must beat down one half of it, deface the other, and throw its mutilated members around in heaps. In short from a *smooth* building we must turn it into a *rough* ruin." [1] I do not believe that the "beautiful" is not equally beautiful

[1] [William Gilpin, *Five Essays on Picturesque Subjects*.]

in picture, that the beautiful statue for instance, however smooth, may not appear beautiful when daguerreotyped or painted. In the case instanced he must use the mallet either because the building is not beautiful, or because he cannot catch and render the spirit of its beauty. If there is the same genius in the painter that there was in the architect, the painting will be beautiful too. The smooth may be more difficult, but is not impossible, to be represented by picture. It is not the mere roughness of the surface which makes the patriarchal head more interesting than that of a youth ever, nor is this the reason why we "admire the Laocoön more than the Antinoüs," for we do not admire it more than the Apollo Belvidere.

True, there are many reasons why the painter should select the rough. It is easier to execute; he can do it more justice. In the case of the patriarchal head, those lines and wrinkles which man's life has produced his hand can better represent than the fullness and promise of infancy; and then, on the whole, perhaps, we have more sympathy with performance than promise. The humble or sincere and true is more commonly rough and weather-beaten, so that from association we prefer it. But will Mr. Gilpin assert that the Venus and Apollo are not fit objects for painting?

So we prefer the poor man's irregular garden for its sincerity and truth to the rich man's formal and pretending parterres, and the "worn-out cart-horse" to the pampered steed for similar reasons. Indeed "he does not recommend his art," if he fails to fix the fleeting forms of the beautiful. The worn-out cart-horse is

thought to be more picturesque and admits "of being rendered with spirit," because we can far more easily enter into his spirit, whether as beholders or painters, — have more sympathy with it than with that of the free horse of the prairie. Beside, what has the pampered coach-horse done to deserve our respect and sympathy?

He defends the painter, first, by saying that "a free, bold touch is in itself pleasing," and assuming to too great an extent that the objects which he calls beautiful do not admit of being painted in this touch, — but God used a free and bold touch when he created them, and so may the creative painter do when he paints them, — secondly, by saying that "the very essence of his art requires" that he select the Picturesque for the sake of composition, variety, light and shade, and coloring.

But he is superficial. He goes not below the surface to account for the effect of form and color, etc. For instance, he thus attempts to account for the fact that the pampered steed may be a picturesque object. "Though the horse, in a *rough* state, as we have just observed, or worn down with labor, is more adapted to the pencil than when his sides shine with brushing, and high feeding; yet in this latter state also he is certainly a picturesque object. But it is not his smooth, and shining coat, that makes him so. It is the apparent interruption of that smoothness by a variety of shades, and colors, which produces the effect. Such a play of muscles appears, everywhere, through the fineness of his skin, gently swelling, and sinking into each other — he

is all over so *lubricus aspici*, the reflections of light are so continually shifting upon him, and playing into each other, that the eye never considers the smoothness of the surface; but is amused with gliding up, and down, among those endless transitions, which in some degree, supply the room of *roughness*." And this is the reason why a pampered steed can be painted! Mark that there is not the slightest reference to the fact that this surface, with its lights and shades, belongs to a horse and not to a bag of wind. The same reasoning would apply equally well to one of his hind quarters hung bottom upwards in a butcher's stall. This comes of not inquiring "into the general sources of beauty."

So I should answer that "the beauty of an old head" is *not* "greatly improved by the *smoothness* of the bald pate" (if bald pates were rough they would do just as well), but it may be improved by the associations which a bald pate suggests.

He fails to show why roughness is essential to the picturesque, because he does not go beneath the surface.

To return to the horse, I should say that no arrangement of light and shade without reference to the object, actual or suggested, so lit and shaded can interest us powerfully, any more than the paint itself can charm us.

In the "Essay on Picturesque Travel," after speaking of the *objects* of such travel, he treats of the way in which "the mind is gratified by these objects." He says: "We might begin in moral style, and consider the objects of nature in a higher light than merely as amusement. We might observe, that a search after beauty should naturally lead the mind to the great origin of

all beauty," etc. "But though in theory this seems a natural climax, we insist the less upon it, as in fact we have scarce ground to hope that every admirer of *picturesque beauty* is an admirer also of the *beauty of virtue.*" And he a clergyman, "vicar of Boldre!" This is to give us the play of Hamlet with Hamlet's part left out. But there is no half way in this case that is not at the same time half true.

Again, as if that were true, which G. asserts in another essay, that "the *eye*, which has nothing to do with *moral sentiments*, and is conversant only with *visible forms*, is disgusted," etc., any more than a telescope is disgusted! As if taste resided in the eye! As if the eye, which itself cannot see at all, were conversant with surfaces! Yet he adds directly that "there is a still *higher character* in landscapes than what arises from the *uniformity of objects* — and that is the power of furnishing images *analogous to the various feelings*, and *sensations of the mind.*" Can good landscape have any lower aim? But he says, "To convey however ideas of this kind is the perfection of the art: it requires the splendor, and variety of colors; and is not to be attempted in such trivial sketches as these." And this is not modesty merely, but a low estimate of his own art.

I might have said some pages back that he allows that grandeur which is produced "by uniformity of color, and a long continuation of line," falls under the head of picturesque beauty, though he says that the idea of it is not easily caught.

The elegant Gilpin. I like his style and manners better than anything he says.

Jan. 9. P. M. — To Heywood's Pond with Tappan.

We were looking for rainbow-tinted clouds, small whiffs of vapor which form and disperse, this clear, cold afternoon, when we saw to our surprise a star, about half past three or earlier, a mere round white dot. Is the winter then such a twilight? I wonder if the savages ever detected one by day. This was about an hour and a half before sunset. T. said he had lost fowls by the owls. They selected the roosters and took off their heads and ate their insides. Found many snow-fleas, apparently frozen, on the snow.[1]

T. has a singularly elastic step. He will run through the snow, lifting his knees like a child who enjoys the motion. When he slumped once through to water and called my attention to it, with an indescribable flash of his eye, he reminded me forcibly of Hawthorne's little son Julian. He uses the greatest economy in speech of any man I know. Speaks low, beside, and without emphasis; in monosyllables. I cannot guess what the word was for a long time. His language is different from the Algonquin.

Jan. 10. I cannot thaw out to life the snow-fleas which yesterday covered the snow like pepper, in a frozen state. How much food they must afford to small birds, — chickadees, etc. The snow went off remarkably fast in the thaw before the 7th, but it is still deep, lying light in swamps and sprout-lands, somewhat hollow beneath. The thaw produced those yellowish pools in hollows in

[1] *Vide* below [next date].

the fields, where water never stands else, and now perhaps there is a bottom of snow; and now for the last three days they have afforded good sliding. You got a start by running over the snow-crust. In one place, where the depression was inconsiderable but more extensive than usual, I found that it was mere glazed snow on which I slid, it having rapidly frozen dry.

The sportsmen chose the late thaw to go after quails. They come out at such times to pick the horse-dung in the roads, and can be traced thence to their haunts.

When we were walking last evening, Tappan admired the soft rippling of the Assabet under Tarbell's bank. One could have lain all night under the oaks there listening to it. Westward forty rods, the surface of the stream reflected a silvery whiteness, but gradually darkened thence eastward, till beneath us it was almost quite black.

What you can recall of a walk on the second day will differ from what you remember on the first day, as the mountain chain differs in appearance, looking back the next day, from the aspect it wore when you were at its base, or generally, as any view changes to one who is journeying amid mountains when he has increased the distance.

With Tappan, his speech is frequently so frugal and reserved, in monosyllables not fairly uttered clear of his thought, that I doubt if he did not cough merely, or let it pass for such, instead of asking what he said or meant, for fear it might turn out that he coughed merely.

Channing showed me last night on a map where, as

he said, he "used to walk" in Rome. He was there sixteen days.

I mistook the creaking of a tree in the woods the other day for the scream of a hawk. How numerous the resemblances of the animate to the inanimate!

Jan. 11. Thick fog in the night. The trees, accordingly, now white with hoary frost, just as the frost forms on a man's beard or about a horse's mouth.

P. M. — To Cliffs and Walden.

The north side of all stubble, weeds, and trees, and the whole forest is covered with a hoar frost a quarter to a half inch deep. It is easily shaken off. The air is still full of mist. No snow has fallen, but, as it were, the vapor has been caught by the trees like a cobweb. The trees are bright hoary forms, the ghosts of trees. In fact, the warm breath of the earth is frozen on its beard. Closely examined or at a distance, it is just like the sheaf-like forms of vegetation and the diverging crystals on the window-panes. The stiff stubble has a soft, drooping look; now feels the wind and waves like plumes. It is a *chevaux-de-frise* or armor of frost-needles, exclusively on the north side, with a myriad diverging feathery points, sheaves of darts. It covers the width of the twigs, but only a narrow and irregular strip on the larger limbs and trunk; also on the edges and protuberances of the leaves still turned toward the northern foe. Even birds' nests have a white beard.

Birches, especially, are the trees for these hoar frosts and also for glazes. They are so thickly twigged and

of such graceful forms and attitudes. I can distinguish a birch now further off than ever. As I stand by its north side (Hubbard's Grove), almost the whole forest is concealed by the hoar frost. It is as if the mist had been caught on an invisible net spread in the air. Yet the white is tinged with the ground color of reddish oak leaves and even green pine-needles. You look up and behold the hugest pine, as tall as a steeple, all frosted over. Nature is now gone into her winter palace. The trunks of the pines, greened with lichens, are now more distinct by contrast. Even the pale yellowish green of lichens speaks to us at this season, reminding us of summer.

The humblest weed is indescribably beautiful, of purest white and richest form. The hogweed becomes a fairy's wand. The blue-curls, rising from bare gray sand, is perhaps particularly beautiful. Every part of the plant is concealed. Its expression is changed or greatly enriched by this exaggeration or thickening of the mere linear original. It is an exquisitely delicate frost plant, trembling like swan's-down. As if Nature had sprinkled her breast with down this cold season. The character of each tree and weed is rendered with spirit, — the pine plumes and the cedar spires. All this you see going from north to south; but, going the other way (*perchance ?*), you might not be struck with the aspect of the woods.

Now (or a little earlier, just after the thaw, when it began to freeze) is the time to go out and see the ice organ-pipes. I walked the whole length of the Cliffs, just at the base of the rocks, for this purpose; but [it]

is rather late; no water is flowing now. These great organ-pipes are formed where the water flows over triangular projections of the rocks. The perpendicularity of the icicles contrasts strangely with the various angles of the rocks. It is now quite cold, and in many places only a sharp spear of purest crystal, which does not reach the rock below, is left to tell of the water that has flowed here. These solid, pipe-like icicles commonly unite by their sides and form rows of pillars or irregular colonnades, run together, between which here and there you can insert your hand, revealing a peculiar internal structure, as of successive great drops. Thus when the water has fallen perpendicularly. And behind these perpendicular pipes, or congregated pillars, or colonnades run together, are formed the prettiest little aisles or triangular alcoves with lichen-clad sides. Then the ice spreads out in a thin crust over the rock, with an uneven surface as of bubbling water, and you can see the rock indistinctly through ice three or four inches thick, and so on, by successive steps or shelves down the rock.

Saw where a squirrel, probably a red one, had apparently brought up to the mouth of his hole quite a quantity of walnuts and eaten them there.

I observe that the surface of the snow under the hemlocks is now very thickly strewn with cones and scales. Was it done by the thaw? Or did the partridges help do it? The ends of the lower limbs are still under the snow.

At night a fine freezing rain begins, which turns the frost to a glaze.

Jan. 12. A. M. — It still rains very finely. The ground, etc., is covered with a black glaze, wet and shiny like water, like an invisible armor, a quarter of an inch or more thick.

Every winter the surface of the pond to the depth of a foot becomes solid so as to support the heaviest teams, and anon the snow covers it to an equal depth, so that it is not to be distinguished from a level field. Thus, like the marmots in the surrounding hills, it too closes its eyelids and becomes partially dormant.[1]

Coarse, hard rain from time to time to-day, with much mist, — thaw and rain. The cocks crow, for the ground begins to be bare in spots. Walking, or wading, very bad.

Jan. 13. Still warm and thawing, springlike; no freezing in the night, though high winds. Are we not apt to have high winds after rain?

P. M. — To Walden, Goose Pond, and Britton's Camp.

The landscape is now patches of bare ground and snow; much running water with the sun reflected from it. Lately all was clean, dry, and tight. Now, though clear and bright, all is moist and dissolving. The cocks crow with new brag. Even the telegraph harp seems to sound as with a vernal sound, heralding a new year. Those pools of greenish-yellow water with a snow bot-

[1] [*Walden*, pp. 312, 313; Riv. 437.]

tom, in hollows in fields and woods, are now much increased, ready to be frozen. These thawing days must have been to some extent lichen days too. I did not examine. The stumps are now richly bronzed with greenish mealy lichens. A rich scale is slowly creeping over and covering them. How the red coxcomb lichens contrast with the snow! Some of these days I have heard Therien's axe more than a mile distinctly. He has already carried it home and ground it twice, having dulled it on a stone. Walden is covered with puddles, in which you see a dim reflection of the trees and hills, as in weak soapsuds, on the grayish or light-colored snow-ice.

I saw yesterday my snowshoe tracks quite distinct, though made January 2d. Though they pressed the snow down four or five inches, they consolidated it, and it now endures and is two or three inches above the general level there, and more white.

The water on Walden has been flowing into the holes cut for pickerel and others. It has carried with it, apparently from the surface, a sort of dust that collects on the surface, which produces a dirty or grayish-brown foam. It lies sometimes several feet wide, quite motionless on the surface of the shallow water above the ice, and is very agreeably and richly figured, like the hide of some strange beast — how cheap these colors in nature! — parts of it very much like the fur of rabbits, the tips of their tails. I stooped to pick it up once or twice, — now like bowels overlying one another, now like tripe, now like flames, *i. e.* in form, with the free, bold touch of Nature. One would not believe that the

impurities which thus color the foam could be arranged in such pleasing forms. Give any material, and Nature begins to work it up into pleasing forms.

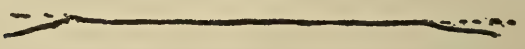
In the deep hollow this side of Britton's Camp, I heard a singular buzzing sound from the ground, exactly like that of a large fly or bee in a spider's web. I kneeled down, and with pains traced it to a small bare spot as big as my hand, amid the snow, and searched there amid the grass stubble for several minutes, putting the grass aside with my fingers, till, when I got nearest to the spot, not knowing but I might be stung, I used a stick. The sound was incessant, like that of a large fly in agony, but though it made my ears ache, and I had my stick directly on the spot, I could find neither prey nor oppressor. At length I found that I interrupted or changed the tone with my stick, and so traced it to a few spires of dead grass occupying about a quarter of an inch in diameter and standing in the melted snow water. When I bent these one side it produced a duller and baser tone. It was a sound issuing from the earth, and as I stooped over it, the thought came over me that it might be the first puling infantine cry of an earthquake, which would ere long ingulf me. There was no bubble in the water. Perhaps it was air confined under the frozen ground, now expanded by the thaw, and escaping upward through the water by a hollow grass stem. I left it after ten minutes, buzzing as loudly as at first. Could hear it more than a rod.

Schoolcraft says, "The present name is derived from the Dutch, who called it Roode Eylant (Red Island),

from the autumnal color of its foliage." (Coll. R. I. Hist. Soc. vol. iii.)

Jan. 14. If the writers of the brazen age are most suggestive to thee, confine thyself to them, and leave those of the Augustan age to dust and the book-worms.

Was surprised this morning to see how much the river was swollen by the rain of day before yesterday. The channel, or river itself, is still covered with ice, but the meadows are broad sheets of dark-blue water, contrasting with the white patches of snow still left. The ice on the river rises with the water in this case, while it remains attached to the bottom by one edge on each side, and is heaved up and cracked in consequence along the line of the willows, thus:—



All the water on the meadows lies over ice and snow. The other day I started a partridge from a sumach bush with berries on it, and to-day from a barberry bush with berries. I suspect that they eat the berries of both.

Cato makes the vineyard of first importance to a farm; second, a well-watered garden; third, a willow plantation (*salictum*); fourth, an olive-yard (*oletum*); fifth, a meadow or grass ground (?) (*pratum*); sixth, a grain-field or tillage (?) (*campus frumentarius*); seventh, a copsewood (?) for fuel (?) (*silva caedua*) (Varro speaks of planting and cultivating this); eighth, an

arbustum (Columella says it is a plantation of elms, etc., for vines to rest on) (*arbustum*); ninth, a wood that yields mast (*glandaria silva*). He says elsewhere the *arbustum* yields *ligna et virgae.*

He says: "In earliest manhood the master of a family must study to plant his ground; as for building he must think a long time about it (*diu cogitare*); he must not think about planting, but do it. When he gets to be thirty-six years old, then let him build, if he has his ground planted. So build, that the villa may not have to seek the farm, nor the farm the villa." This contains sound advice, as pertinent now as ever.

As for farming implements, I do not see but the Romans had as great a variety as are now exhibited in the Crystal Palace.

The master of a family must have in his rustic villa "cellam oleariam, vinariam, dolia multa, uti lubeat caritatem exspectare, et rei et virtuti, et gloriae erit" (an oil and wine cellar, many casks, so that it may be pleasant to expect hard times; it will be for his advantage, and virtue and glory).

This, too, to make farmers prudent and thrifty: "Cogitato quotannis tempestates magnas venire, et oleam dejicere solere" (Consider that great tempests come every year, and the olive is wont to fall). The steward must not lend seed for sowing, etc. He may have two or three families of whom to borrow and to whom to lend and no more.

I just had a coat come home from the tailor's. Ah me! Who am I that should wear this coat? It was

fitted upon one of the devil's angels about my size. Of what use that measuring of me if he did not measure my character, but only the breadth of my shoulders, as it were a peg to hang it on. This is not the figure that I cut. This is the figure the tailor cuts. That presumptuous and impertinent fashion whispered in his ear, so that he heard no word of mine. As if I had said, "Not my will, O Fashion, but thine be done." We worship not the Parcæ, nor the Graces, but Fashion, offspring of Proteus and Vanessa, of Whim and Vanity. She spins and weaves and cuts with the authority of the Fates. Oh, with what delight I could thrust a spear through her vitals or squash her under my heel! Every village might well keep constantly employed a score of knights to rid it of this monster. It changes men into bears or monkeys with a single wave of its wand. The head monkey at Paris, Count D'Orsay, put on the traveller's cap, and now all the monkeys in the world do the same thing. He merely takes the breadth of my shoulders and proceeds to fit the garment to Puck, or some other grotesque devil of his acquaintance to whom he has sold himself.

I despair of ever getting anything quite simple and honest done in this world by the help of men. They would have to be passed through a powerful press, *à la* cider-mill, that their old notions might be thoroughly squeezed out of them, and it would be some time before they would get upon their legs again. Then undoubtedly there would be some one with a maggot in his head, offspring of an egg deposited there nobody knows when; fire does not kill these things, and you

would have lost your labor.[1] I could cry, if it were not for laughing.

"If you have done one thing late, you will do all your work late," says Cato to the farmer. They raised a sallow (*salicem*) to tie vines with. Ground subject to fogs is called *nebulosus*. They made a cheap wine of poor grapes, called *vinum praeliganeum*, for the laborers to drink. (So our farmers give their men rum or weak cider.)

Oxen "must have muzzles [or little baskets, *fiscellas*],[2] that they may not go in quest of grass (*ne herbam sectentur*) when they plow."

Jan. 17. Surveying for William O. Benjamin in east part of Lincoln. Saw a red squirrel on the wall, it being thawing weather. Human beings with whom I have no sympathy are far stranger to me than inanimate matter, — rocks or earth. Looking on the last, I feel comparatively as if I were with my kindred.

Cato, prescribing a *medicamentum* for oxen, says, "When you see a snake's slough, take it and lay it up, that you may not have to seek it when it is wanted." This was mixed with bread, corn, etc.

He tells how to make bread and different kinds of cakes, *viz.*, a *libum*, a *placenta*, a *spira* (so called because twisted like a rope, perhaps like doughnuts), *scriblita* (because ornamented with characters like writing), *globi* (globes), etc., etc. Tells how to make a vow

[1] [*Walden*, p. 28; Riv. 42. See also *Familiar Letters*, pp. 225, 226; Riv. 271, 272.]

[2] [The brackets are Thoreau's.]

for your oxen to Mars Sylvanus in a wood with an offering, no woman to be present nor know how it is done.

When the brine will float a dry *maena* (a fish) or an egg, then it will preserve meat. Tells how to cram hens and geese. If you wish to remove an ill savor from wine, he recommends to heat a brick and pitch it and let it down by a string to the bottom of the cask and there remain two days, the cask being stopped.

"If you wish to know if water has been added to wine, make a little vessel of ivy wood (*materia edera-cea*). Put into it the wine which you think has water in it. If it has water, the wine will run out (*effluet*), the water will remain. For a vessel of ivy wood does not hold wine."

"The dogs must be shut up by day that they may be more sharp (*acriores*, more fierce (?)) and vigilant by night." So I might say of a moon and star gazer.

"Make a sacrificial feast for the oxen when the pear is in blossom. Afterward begin to plow in the spring." "That day is to be holy (*feriae*) to the oxen, and herdsmen, and those who make the feast." They offer wine and mutton to Jupiter Dapalis, also to Vesta if they choose.

When they thinned a consecrated grove (*lucum conlucare*) (as if [to] let in the light to a shaded place) they were to offer a hog by way of expiation and pray the god or goddess to whom it was sacred to be favorable to them, their house and family and children. Whatever god or goddess thou art to whom this grove is sacred, I pray thee be propitious. Should not all groves

be regarded as a *lucus*, or consecrated grove, in this sense? I wish that our farmers felt some such awe when they cut down our consecrated groves; would realize that they are sacred to some god.

A *lustrum*, or sacrifice, of a sow, sheep, and bull (*suovitaurilia*) was performed every fifth year, when various things were prayed for.

Gives several charms to cure diseases, mere magician's words.

Jan. 19. Went to Cambridge to court.

Dr. Harris says that my cocoons found in Lincoln in December are of the *Attacus cecropia*, the largest of our emperor moths. He made this drawing[1] of the four kinds of emperor moths which he says we have. The cecropia is the largest. The cocoon must be right end uppermost when they are ready to come out. The *A. Promethea* is the *only moth* whose cocoon has a *fastening wound round the petiole of the leaf*, and *round* the *shoot, the leaf partly* folded round it.

That spider whose hole I found, and which I carried him, he is pretty sure is the *Lycosa fatifera*.

In a large and splendid work on the insects of Georgia, by Edwards and Smith (?), near end of last century, up-stairs, I found plates of the above moths, called not *Attacus* but *Phalæna*, and other species of *Phalæna*.

He thinks that small beetle, slightly metallic, which I saw with grubs, etc., on the yellow lily roots last fall was a *Donax* or one of the *Donasia* (?).[2]

[1] [Dr. Harris's drawing is inserted here.]

[2] [*Donacia* is a genus of beetles. *Donax* is a genus of molluscs.]

In Josselyn's account of his voyage from London to Boston in 1638, he says, "June the first day in the afternoon, very thick foggie weather, we sailed by an enchanted island," etc. This kind of remark, to be found in so many accounts of voyages, appears to be a fragment of tradition come down from the earliest account of Atlantis and its disappearance.

Varro, having enumerated certain writers on agriculture, says accidentally [*sic*] that they wrote *soluta ratione, i. e.* in prose. This suggests the difference between the looseness of prose and the precision of poetry. A perfect expression requires a particular rhythm or measure for which no other can be substituted. The prosaic is always a loose expression.

Varro divides fences into four kinds, — *unum naturale, alterum agreste, tertium militare, quartum fabrile.* (Many kinds of each.) The first is the living hedge. One kind of *sepes agrestis* is our rail fence, and our other dead wooden farm fences would come under this head. The military *sepes* consists of a ditch and rampart; is common along highways; sometimes a rampart alone. The fourth is the mason's fence of stone or brick (burnt or unburnt), or stone and earth together.

Jan. 22. Saw, January 20th, some tree sparrows in the yard. Once or twice of late I have seen the mother-o'-pearl tints and rainbow flocks in the western sky. The usual time is when the air is clear and pretty cool, about an hour before sundown. Yesterday I saw a very permanent specimen, like a long knife-handle of mother-of-pearl, very pale with an interior blue and

rosaceous tinges. Methinks the summer sky never exhibits this so finely.

When I was at C.'s the other evening, he punched his cat with the poker because she purred too loud for him.

R. Rice says he saw a white owl two or three weeks since. Harris told me on the 19th that he had never found the snow-flea.

No second snow-storm in the winter can be so fair and interesting as the first. Last night was very windy, and to-day I see the dry oak leaves collected in thick beds in the little hollows of the snow-crust. These later falls of the leaf.

A fine freezing rain on the night of the 19th produced a hard crust on the snow, which was but three inches deep and would not bear.

Jan. 23. Love tends to purify and sublime itself. It mortifies and triumphs over the flesh, and the bond of its union is holiness.

The increased length of the days is very observable of late. What is a winter unless you have risen and gone abroad frequently before sunrise and by starlight? Varro speaks of what he calls, I believe, before-light (*antelucana*) occupations in winter, on the farm. Such are especially milking, in this neighborhood.[1]

[1] Speaking of the rustic villa, you must see that the kitchen is convenient, "because some things are done there in the winter before daylight (*antelucanis temporibus*); food is prepared and taken." In the study are not some things to be done before daylight, and a certain food to be prepared there?

If one may judge from Josselyn, they began to be weather-wise very early in New England. He says: "The obscuring of the smaller stars is a certain sign of tempests approaching. . . . The resounding of the sea from the shore, and murmuring of the winds [*sic* in Josselyn] in the woods without apparent wind, sheweth wind to follow.[1] . . . The redness of the sky in the morning, is a token of winds, or rain, or both," etc., etc. "If the white hills look clear and conspicuous, it is a sign of fair weather; if black and cloudy, of rain; if yellow, it is a certain sign of snow shortly to ensue," etc. *Vide* his "Two Voyages."[2] He speaks of "the Earth-nut bearing a princely flower, the beautiful leaved Pirola,"[3] etc. Is n't this the glossy-leaved winter-green?

At noon, go to Worcester.

Jan. 24. In Worcester.

From 9 A. M. to 4 P. M., walked about six miles northwest into Holden with Blake, returning by Stonehouse Hill. A very cold day. Less forest near Worcester than in Concord, and that hardwood. No dark pines in the horizon. The evergreen laurel is a common underwood, contrasting agreeably with the snow. Large, broad-backed hills.

De Quincey's "Historical and Critical Essays" I have not read (2 vols.). Saw a red squirrel out.

Jan. 25. At noon return to Concord.

[1] [*Cape Cod*, p. 98; Riv. 115.]

[2] [*Two Voyages to New England*, pp. 56, 57.] [3] [*Op. cit.*, p. 59.]

A very cold day.

Saw a man in Worcester this morning who took a pride in never wearing gloves or mittens. Drives in the morning. Said he succeeded by keeping his arm and wrist well covered. He had a large hand, one of his fingers as big as three of mine. But this morning he had to give up. The 22d, 23d, 24th, and 25th of this month have been the coldest spell of weather this winter.

Clear and cold and windy.

Jan. 26. All day at court at Cambridge.

Jan. 27. I have an old account-book, found in Deacon R. Brown's garret since his death. The first leaf or two is gone. Its cover is brown paper, on which, amid many marks and scribblings, I find written: —

" Mr. Ephraim Jones
His Wast Book
Anno Domini
1742 "

It extends from November 8th, 1742, to June 20th, 1743 (inclusive). It appears without doubt from the contents of this book that he is the one of whom Shattuck writes in his history that he " married Mary Hayward, 1728, and died November 29th, 1756, aged 51; having been captain, town-clerk, and otherwise distinguished." His father's name was Ephraim, and he had a son Ephraim. The entries are made apparently by himself, or a boy, or his wife, or some other when he was out. The book is filled with familiar Concord

names, the grandfathers and great-grandfathers of the present generation. Dr. Hartshorn — he lived to be ninety-two — and Dr. Temple send to the store once or twice. It is more important now what was bought than who bought it.

The articles most commonly bought were mohair (commonly with buttons) (a kind of twist to sew on buttons with), rum (often only a gill to drink at the store), — more of these than anything; salt, molasses, shalloon, fish, calico, some sugar, a castor hat, almanac, psalter (and sometimes primer and testament), paper, knee-buckles and shoe-buckles, garters and spurs by the pair, deer skins, a fan, a cart whip, various kinds of cloth and trimmings, — as half-thick, osnaburg, a very little silk, ferret, quality, serge for breeches, etc., etc., — gloves, a spring knife, an ink-horn, a gun, cap, spice, a pocket case, timber, iron, etc., earthenware; no tea (?) (I am in doubt about one or perhaps two entries), nor coffee, nor meal, nor flour. Of the last two they probably raised all they wanted. Credit is frequently given for timber and once for cloth brought to the store.

On the whole, it is remarkable how little provision was sold at the store. The inhabitants raised almost everything for themselves. Chocolate is sold once. Rum, salt, molasses, fish, a biscuit with their drink, a little spice, and the like are all that commonly come under this head that I remember.

On a loose piece of paper is a bill for "todey," "a bowl of punch," etc., and on another piece is Jonathan Dwight's (innholder's?) bill against the Estate of

Capt. Ephraim Jones for entertainment, etc., etc. (apparently he treated his company) at divers times for half a dozen years, amounting to over £146. One entry is "Dea Brown to flip & rum."

The people apparently made their own cloth and even thread, and hence for the most part bought only buttons and mohair and a few trimmings.

Feb. 1, 1742. "Town of Concord Dr to sundry for the funerel of Widow Williams daughter to 5 pr gloves @ 1/9 1 D P. @ 2/1 ½ . . . 0–10–10½ "
Jan. 10, 1742 (3). "Jon[a] Edes to 3 Raccoon skins @ 2/9 2 minks @ 1/6 4 musquash @ /3 ½ . } 0–12– 5 "
Jan. 18, 1742 (3). "John Melven Cr by 1 Grey fox 0– 2– 3 "
Feb. 14, 1742 (3). "Aaron Parker Cr by 100 squirell skins . . . . . 0– 6– 3 "

Deer skins were sold at from ten to seventeen shillings. Sometimes it is written "old" or "new tenor."

Many of the customers came from as far as Harvard, or much farther.

A fan, a jack-knife, or a pair of garters are much more important relatively to the other goods sold than now.

No butter, nor rice, nor oil, nor candles are sold. They must have used candles [of their own making], made their own butter, and done without rice. There is no more authentic history of those days than this "Wast Book" contains, and, being money matters, it is more explicit than almost any other statement; something *must* be said. Each line contains and states explicitly a fact. It is the best of evidence of several facts. It tells distinctly and authoritatively who sold, who bought, the article, amount, and value, and the date. You could

not easily crowd more facts into one line. You are warned when the doctor or deacon had a new suit of clothes, by the charge for mohair, buttons, and trimmings, or a castor hat; and here also is entered the rum which ran down their very throats.

Attended the auction of Deacon Brown's effects a little while to-day, — a great proportion of old traps, rubbish, or trumpery, which began to accumulate in his father's day, and now, after lying half a century in his garret and other dust-holes, is not burned, but surviving neighbors collect and view it, and buy it, and carefully transport it to their garrets and dust-holes, to lie there till their estates are settled, when it will start again. Among his effects was a dried tapeworm and various articles too numerous and worthless to mention. A pair of old snow-shoes is almost regularly sold on these occasions, though none of this generation has seen them worn here.

I have some good friends from whom I am wont to part with disappointment, for they neither care what I think nor mind what I say. The greatest compliment that was ever paid me was when one asked me what I *thought*, and attended to my answer.

We begin to die, not in our senses or extremities, but in our divine faculties. Our members may be sound, our sight and hearing perfect, but our genius and imagination betray signs of decay. You tell me that you are growing old and are troubled to see without glasses, but this is unimportant if the divine faculty of the seer shows no signs of decay.

Cut this afternoon a cake of ice out of Walden and

brought it home in a pail, another from the river, and got a third, a piece of last year's ice from Sam Barrett's Pond, at Brown's ice-house, and placed them side by side. These lumps are not large enough to show the color. Walden ice has a green tint close by, but is distinguished by its blueness at a distance. The river ice inclines to a more opaque white.[1] Comparing the lumps, Walden ice was, you might say, more crystalline than the river, but both showed the effect of heat more than the Barrett ice of last year, the bubbles being very much elongated and advanced toward the honeycomb stage, while in the Barrett ice they were spherical and there were wide clear spaces. This looked as if it would keep best.

Varro, on grafting, says when the wood is of a close and dry texture they tie a vessel over it from which water drops slowly, that the shoot may not dry up before it coalesces; also "by the turning of some leaves you can tell what season (*tempus*) of the year it is, as the olive and white poplar, and willow. For when their leaves turn, the solstice is said to be past." They had not such a brilliant change of the leaf as we.

Speaking of the nursery, he says: "Herbaeque elidendae, et dum tenerae sunt vellendae, prius enim aridae factae rixantur, ac celerius rumpuntur, quam sequuntur (and the weeds are to be levelled and, while they are tender, pulled up, for if they have first grown tough they resist and break sooner than come up). . . . Contra herba in pratis ad spem foenisiciae nata, non modo non evellenda in nutricatu, sed etiam non cal-

[1] [*Walden*, p. 327; Riv. 457.]

canda. Quo pecus a prato ablegandum, et omne jumentum, ac etiam homines. Solum enim hominis exitium herbae, et semitae fundamentum. (On the other hand, grass in grass-ground, raised with a view to hay, not only is not to be pulled up while it is growing, but is not even to be trodden upon. Wherefore the cattle are to be driven from the mowing, and every beast of burden, and even men. For the sole (track?) of a man's foot is the destruction of the grass, and the foundation of a (foot)path.)" Even so early did the farmers raise this hue and cry about your treading down or going through their grass.

Jan. 29. A very cold morning. Thermometer, or mercury, 18° below zero.

Varro says that *gluma* seems to be *a glubendo* because the grain is shelled from its follicle (*deglubitur*). *Arista*, the beard of grain, is so called because it dries first (*quod arescit prima*). The grain, *granum*, is *a gerendo*, for this is the object of planting, that this may be borne. "But the *spica* (or ear), which the rustics call *speca*, as they have received it from their forefathers, seems to be named from *spes* (hope), since they plant because they *hope* that *this* will be hereafter (*eam enim quod sperant fore*)."

The village is the place to which the roads tend, a sort of expansion of the highway, as a lake of a river, the thoroughfare and ordinary of travellers, a trivial or quadrivial place. It is the body of which roads are the arms and legs. It is from the Latin *villa*, which, together with *via* (a way), or more anciently *vea* and

vella, Varro derives from *veho* (to carry), because the villa is the place to and from which things are carried. The steward or overseer of the villa was a *vilicus*, and those who got their living by teaming (?) (*vecturis*) were said *vellaturam facere*. And whence the Latin *vilis* and our word *villain* (?). The inhabitants are way-worn by the travel that goes by and over them without travelling themselves.

Jan. 30. Another cold morning. Mercury down to 13° below zero.

Frank showed me last night a white hare he had killed. It was frozen stiff, weighed four pounds, and was nearly three feet long. Its hind feet made soft brushes, which painters use in graining doors, etc. The plumage of partridges is most perfect nowadays. The white hare is a dirty white in winter, grayish (?) or brownish in summer; has peculiar puss-like expression in profile. This was frozen in the attitude of running, careering with elastic bound over the snow and amid the bushes. Now, dead, it is the symbol of that speed it was capable of. Frozen as it was, it nearly spanned one breadth of the carpet, or three feet.[1] This morning, though not so cold by a degree or two as yesterday morning, the cold has got more into the house, and the frost visits nooks never known to be visited before. The sheets are frozen about the sleeper's face; the teamster's beard is white with ice. Last night I felt it stinging cold as I came up the street at 9 o'clock; it bit my ears and face, but the stars shone all the

[1] *Vide* [p. 86].

brighter. The windows are all closed up with frost, as if they were ground glass.

The greater part of last week there was no melting in the roads nor on roofs. No more yesterday and to-day. The snow is dry and squeaks under the feet, and the teams creak as if they needed greasing, — sounds associated with extremely cold weather.

P. M. — Up river on ice and snow to Fair Haven Pond.

There is a few inches of snow, perfectly level, which now for nearly a week has covered the ice. Going toward the sun, you are snow-blinded. At each clump of willows on the meadow, it looks as if there were a hillock, out of which they grow. This appearance is produced by the willow twigs holding up the ice to [the] height at which it was frozen after the last thaw, about two feet above the present level. It forms a regularly rounded hillock. We look at every track in the snow. Every little while there is the track of a fox — maybe the same one — across the river, turning aside sometimes to a muskrat's cabin or a point of ice, where he has left some traces, and frequently the larger track of a hound, which has followed his trail. It is much easier and pleasanter to walk thus on the river, the snow being shallow and level, and there is no such loud squeaking or cronching of the snow as in the road, and this road is so wide that you do not feel confined in it, and you never meet travellers with whom you have no sympathy.

The winter, cold and bound out as it is, is thrown to us like a bone to a famishing dog, and we are expected

to get the marrow out of it. While the milkmen in the outskirts are milking so many scores of cows before sunrise these winter mornings, it is our task to milk the winter itself. It is true it is like a cow that is dry, and our fingers are numb, and there is none to wake us up. Some desert the field and go into winter quarters in the city. They attend the oratorios, while the only music that we countrymen hear is the squeaking of the snow under our boots. But the winter was not given to us for no purpose. We must thaw its cold with our genialness. We are tasked to find out and appropriate all the nutriment it yields. If it is a cold and hard season, its fruit, no doubt, is the more concentrated and nutty. It took the cold and bleakness of November to ripen the walnut, but the human brain is the kernel which the winter itself matures. Not till then does its shell come off. The seasons were not made in vain. Because the fruits of the earth are already ripe, we are not to suppose that there is no fruit left for winter to ripen. It is for man the seasons and all their fruits exist. The winter was made to concentrate and harden and mature the kernel of his brain, to give tone and firmness and consistency to his thought. Then is the great harvest of the year, the harvest of thought. All previous harvests are stubble to this, mere fodder and green crop. Now we burn with a purer flame like the stars; our oil is winter-strained. We are islanded in Atlantic and Pacific and Indian Oceans of thought, Bermudas, or Friendly or Spice Islands.

Shall we take refuge in cities in November? Shall the nut fall green from the tree? Let not the year be

disappointed of its crop. I knew a crazy man who walked into an empty pulpit one Sunday and, taking up a hymn-book, remarked: "We have had a good fall for getting in corn and potatoes. Let us sing Winter." So I say, "Let us sing winter." What else can we sing, and our voices be in harmony with the season?

As we walked up the river, a little flock of chickadees (apparently) flew to us from a wood-side fifteen rods off, and uttered their lively *day day day*, and followed us along a considerable distance, flitting by our side on the button-bushes and willows. It is the most, if not the only, sociable bird we have.

Now is the time to fill ice-houses, for fear they may not have another chance for solid ice. Brown filled his last week.

I will be a countryman. I will not go to the city, even in winter, any more than the sallows and sweet-gale by the river do. I see their yellow osiers and freckled, handsomely imbricated buds,[1] still rising above the ice and snow there, to cheer me.

The white rabbit is a large fellow, well furred. What does he get to eat, being a vegetable liver? He must be hardy and cunning in his way. His race have learned by long practice to find their food where a newcomer would inevitably starve.

How retired an otter manages to live! He grows to be four feet long without any mortal getting a glimpse of him, — as long as a boy.

Sometimes one of those great cakes of green ice from Walden or Sam Barrett's Pond slips from the ice-man's

[1] Or catkins.

sled in the street and lies there like a great emerald, an object of interest to all travellers.[1]

The hips of the late rose are still abundant and perfect, amid the button-bushes.

Jan. 31. P. M. — To Great Meadows and Beck Stow's.

The wind is more southerly, and now the warmth of the sun prevails, and is felt on the back. The snow softens and melts. It is a beautiful clear and mild winter day. Our washwoman says she is proud of it. Any clear day, methinks, the sun is ready to do his part, and let the wind be right, and it will be warm and pleasant-like, at least now that the sun runs so high a course. But I do not melt; there is no thaw in me; I am bound out still.

I see the tree sparrows, one or two at a time, now and then, all winter, uttering a faint note, with their bright-chestnut crown and spot on breast and barred wings. They represent the sparrows in the winter.

Went to the Great Meadows by the Oak Island. The maples along the edge of the meadow, which all winter have been perfectly leafless, have an agreeable mixed, slightly pepper-and-salt look, spotted or barred with white lichens. It is an agreeable maze to the eye, so thick their bare and clean gray limbs.

Many tracks of partridges there along the meadow-side in the maples, and their droppings where they appear to have spent the night about the roots and between the stems of trees. I think they eat the buds of

[1] [*Walden*, p. 327; Riv. 457.]

the azalea. And now, with a mew, preluding a whir, they go off before me. Coming up, I follow her tracks to where she eased herself for lightness, and immediately after are five or six parallel cuts in the snow, where her wing struck when she lifted herself from the ground, but no trace more.

I pass the woodchoppers, busily felling trees or cutting up those which they have felled. One is measuring his lengths with his axe-helve and does not see me.

The pitch pines are yellowish, the white incline to bluish. In the winter, when there are no flowers and leaves are rare, even large buds are interesting and somewhat exciting. I go a-budding like a partridge. I am always attracted at this season by the buds of the swamp-pink, the poplars, and the sweet-gale.

A hundred years ago, as I learned from Ephraim Jones's ledger, they sold bark in our street. He gives credit for a load. Methinks my genius is coeval with that time. That is no great wildness or *selvaggia* that cannot furnish a load of bark, when the forest has lost its shagginess. This is an attempt to import this wildness into the cities in a thousand shapes. Bark is carried thither by ship and by cartloads. Bark contains the principle of tannin, by which not only the fibre of skins but of men's thoughts is hardened and consolidated. It was then that a voice was given to the dog, and a manly tone to the human voice. Ah! already I shudder for these comparatively degenerate days of the village, when you cannot collect a load of bark of good thickness.

Varro thinks that when man reached the pastoral or second stage and domesticated animals (*pecus*), "primum non sine causa putant oves assumptas, et propter utilitatem, et propter placiditatem" (they think not without reason that sheep were first taken, both on account of their usefulness and on account of their gentleness); for, as he says, they furnish milk, cheese, their fleece, and skin. It looks to me as if the sheep had been supplied with a superfluity of clothing that it might share it with man, and, as Varro suggests, did not this fleece, on account of its value, come to be called golden? was not this the origin of the fable?

We too have our thaws. They come to our January moods, when our ice cracks, and our sluices break loose. Thought that was frozen up under stern experience gushes forth in feeling and expression. There is a freshet which carries away dams of accumulated ice. Our thoughts hide unexpressed, like the buds under their downy or resinous scales; they would hardly keep a partridge from starving. If you would know what are my winter thoughts look for them in the partridge's crop. They are like the laurel buds, — some leaf, some blossom buds, — which, though food for such indigenous creatures, will not expand into leaves and flowers until summer comes.

"Et primitus oritur herba imbribus primoribus evocata," says Varro.[1]

[1] [*Walden*, p. 343; Riv. 479.]

III

FEBRUARY, 1854

(ÆT. 36)

Feb. 2. Up river on ice to Clematis Brook.

Another warm, melting day, like yesterday. You can see some softening and relenting in the sky. Apparently the vapor in the air makes a grosser atmosphere, more like that of a summer eve. We go up the Corner road and take the ice at Potter's Meadow. The Cliff Hill is nearly bare on the west side, and you hear the rush of melted snow down its side in one place. Here and there are regular round holes in the ice over the meadow, two or three feet in diameter, where the water appears to be warmer, — perchance there is a spring there, — and therein, in shallow water, is seen the cress and one or two other plants, still quite fresh. The shade of pines on the snow is in some lights quite blue.

We stopped awhile under Bittern Cliff, the south side, where it is very warm. There are a few greenish radical leaves to be seen, — primrose and johnswort, strawberry, etc., and spleenwort still green in the clefts. These sunny old gray rocks, completely covered with white and gray lichens and overrun with ivy, are a very cosy place. You hardly detect the melted snow swiftly trickling down them until you feel the drops on your cheek. The winter gnat is seen in the warm air before

the rock. In the clefts of these rocks are the latebræ of many insects, spiders, etc. Were they not sowbugs I found under the *Marchantia polymorpha* (?)? The ice is about eighteen inches thick on Fair Haven. Saw some pickerel just caught there, with a fine lustre to them. Went to the pond in the woods which has an old ditch dug from it near Clematis Brook. The red twigs of the cornels and the yellow ones of the sallows surrounding it are interesting at this season. We prize the least color now. As it is a melting day, the snow is everywhere peppered with snow-fleas, even twenty rods from the woods, on the pond and meadows.

The scream of the jay is a true winter sound. It is wholly without sentiment, and in harmony with winter. I stole up within five or six feet of a pitch pine behind which a downy woodpecker was pecking. From time to time he hopped round to the side and observed me without fear. They are very confident birds, not easily scared, but incline to keep the other side of the bough to you, perhaps.

Already we begin to anticipate spring, and this is an important difference between this time and a month ago. We begin to say that the day is springlike.

Is not January the hardest month to get through? When you have weathered that, you get into the gulf-stream of winter, nearer the shores of spring.

Feb. 3. A driving snow-storm again.

The attractions of the Hollowell Farm were: its complete retirement, being at least two miles from the village, half a mile from any neighbor, and separated

from the highway by a broad field; its bounding on the river; the pleasing ruin of the house and barn; the hollow and lichen-covered apple trees gnawed by rabbits; above all the recollection I had of it from my earliest voyages up the river, when the house was concealed behind a dense grove of red maples, which then stood between it and the river, through which I once heard the house-dog bark; and in general the slight improvements that had been made upon it. These were the motives that swayed, though I did not mention them to the proprietor. To enjoy these things I was ready to carry it on and do all those things which I now see had no other motive or excuse but that I might pay for it and be unmolested in my possession of it; though I knew all the while that it would yield the most abundant crop of the kind I wanted if I could only afford to let it alone. Though it afforded no western prospect, the dilapidated fences were picturesque. I was in some haste to buy, before the proprietor finished getting out some rocks, cutting down some hollow apple trees, and grubbing up some young birches which had sprung up in the pasture, all which in my eyes very much enhanced its value.[1]

Varro speaks of two kinds of pigeons, one of which was wont to alight "on the (*columinibus villae*) columns of a villa (*a quo appellatae columbae*), from which they were called *columbae*, which on account of their natural timidity (*summa loca in tectis captant*) delight in the highest places on the roofs (?) (or under cover?)."

[1] [*Walden*, pp. 92, 93; Riv. 131, 132.]

Feb. 4. F. Brown showed me this afternoon his game killed day before yesterday, — a gray hare, a gray squirrel, and a red squirrel. The red squirrel was peeping out of his nest in a tree. The gray was a fine large fellow in good condition; weighed one pound and a quarter, more than half as heavy as the hare, and his tail still perfectly and beautifully curved over his back. It recovered its place when you stroked it, as if it were full of electricity. All were frozen, the hare, as usual, in the attitude of running. The gray squirrel's ears were white above, edged with tawny brown. He thought that my marsh peep of the fall might [be] the ash-colored sandpiper.

John Moore and Company got about fifty weight of fish at Flint's Pond the same day. Two pickerel weighed nine pounds.

I went over to the Hemlocks on the Assabet this morning. Saw the tracks, I think of a mink, in the shallow snow along the edge of the river, looking for a hole in the ice. A clear, cold morning. The smokes from the village chimneys are quickly purified and dissipated, like vapor, in the air. They do not stream high.

Varro says *Africanae bestiae* for savage or ferocious beasts. Is this a difference of climate merely? Are not some quarters of the globe thus better fitted for the habitation of man for other reasons?

We have not much that is poetic in the accompaniments of the farmer's life. Varro speaks of the swineherd accustoming the swine or boars to come at the sound of a horn when he fed them with acorns. I remember that my grandmother used to call her cow

home at evening from a near pasture to be milked by thumping on the mortar which held her salt. The tinkling cow-bell cannot be spared. Ever what most attracts us in the farmer's life is not its profitableness. We love to go after the cow, not for the sake of her milk or her beef, or the money they yield, but perchance to hear the tinkling of the cow-bell; and we would fain keep a herd of pigs, not because of the profit there is in bacon, but because we have dreamed of hearing the swineherd's horn. We would keep hens, not for eggs, but to hear the cocks crow and the hens cackle.

As for the locality of beehives, Varro says that they must be placed near the villa, "potissimum ubi non resonent imagines, hic enim sonus harum fugae causa existimatur esse" (especially where there are no echoes, for this sound is thought to be the cause of their flight).

Feb. 5. Have two more old account-books of Ephraim Jones, running from 1741 to 1750 and further, — what are called ledgers, I think. Some of the items of the waste-book are here collected, each man's purchases and credit brought together.

I think he must have kept in the store which Goodnow & How first kept in. Some remember when an Ephraim Jones, probably his grandson, kept there. There appears to have been an Ephraim Jones keeping the jail then (probably a son of the first), in the Revolution. There is said to have been a public house with the sign of a black horse where Mr. Brooks's house stands, and hence the society that worshipped there were called the Black Horse Church.

The Leaning Hemlocks in Winter

He sold a few religious books as well as almanacs and primers. In 1745, "to Inchwoods Glimpse of Glory and Mr. (or Wm.) Row's Meditation well Bound," so much. In another place, "to Glimpse of Glory and sundry." Sometimes "a sermon book."

Whitefield was here first in 1741, and there were exciting revivals under Mr. Bliss at this time, says the History. Yet it is a dreary and ghastly life suggested, when you come upon a man's bill for a lock to the Burying Gate, and that is so nearly all that has come down. I picture to myself a rude, straggling village with a wide-open burying-ground gate.

Hezekiah Stratton has credit in 1743, "Feb. 7 by ½ a Catt skin 0–1–4½," — of course a wildcat.

Gingerbread is bought several times, flour once or twice, and credit given for butter once or twice. Several times one nutmeg is bought. Credit given for weaving; also for a load of bark and tar and turpentine from Groton. The lime-kiln and iron mine are frequently named. Credit given for so much "mine," meaning apparently iron ore.

Stephen Parks has credit in 1746, "Aug 2. Cr by one wampum belt 0–15–0." To another, in 1744, "Cr by Dressing 50 squirrel skins 0–6–3." Credit is also given for fox skins and a few deer skins. But above all Jones gives credit for timber brought to the store, or, more commonly, carted to Menotomy, Mistick, Medford, or Charlestown. Some customers live in Nisstissit (?). Credit is given by "digging mine." (Probably iron, after called "mine.")

For example of the quantity of rum and the like bought, *vide* pages 128–193 of No. 2. Long columns run down the page, of nothing but flip, flip, mug flip, mug flip, todey, toddy, punch, punch, bowl of tody, brandy punch, etc., etc.; sometimes charges for the breaking of the glass, also for sugar and limes and flip for himself and company. Jones appears to have kept a public house, for he frequently charges for entertainment.

The animal merely makes him a bed, which he warms with his body in a sheltered place. He does not make a house. But man, having discovered fire, warms a spacious apartment up to the same temperature with his body, and without robbing it, so that he can divest himself of cumbersome clothing, — not keeping his bed, — maintain a kind of summer in the midst of winter, and, by means of windows, even admit the light. It was his invention to box up some air and warm it, make that his bed, and in this live and move and have his being still, and breathe as in a congenial climate or summer, without taking to his bed. Thus he goes a step or two beyond instinct and secures a little time for the fine arts.

Though I began to grow torpid when exposed a long time to the pinching winter air, — my hands and feet grew numb, and my ears and face stiffened, — when I had reached the genial atmosphere of my house, I soon recovered my faculties. I did not squat in a form, or lie in a burrow or ensconced in a nest of leaves or grass, like the squirrels, nor become quite dormant in any hole, like the woodchuck. I ameliorated the

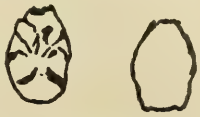
winter climate with fire, and lengthened out the day with a lamp.[1]

Even Varro, to prove that the ancients did not shave (or that there were no barbers), is obliged to refer his readers to their bearded statues. "Olim tonsores non fuisse adsignificant antiquorum statuae, quod pleraeque habent capillum, et barbam magnam." Yet it was true of the old statues only "for the most part."

P. M. — To walk.

Begins to snow.

At Hubbard's blueberry swamp woods, near the bathing-place, came across a fox's track, which I think was made last night or since. The tracks were about two inches long, or a little less, by one and a half wide, shaped thus where the snow was only half an inch deep on ice:



generally from nine to fifteen inches apart longitudinally and three to four inches apart transversely. It came from the west. I followed it back. At first it was difficult to trace, to *investigate*, it, amid some rabbit tracks, of which I did not know whether they had been made before or since. It soon led out of the woods on to the ice of the meadow to a slight prominence, then turned and followed along the side of the wood, then crossed the meadow directly to the riverside just below the mouth of Nut Meadow Brook, visited a muskrat-house there and left its mark, — watered, — for, dog-like, it turned aside to every muskrat-house or

[1] [*Walden*, p. 280; Riv. 393.]

the like prominence near its route and left its mark there. You could easily scent it there. It turned into the meadow eastward once or twice as it went up the riverside, and, after visiting another muskrat's house, where it left its manure, large and light-colored, as if composed of fir, crossed the river and John Hosmer's meadow and potato-field and the road south of Nut Meadow Bridge. (If it had been a dog it would have turned when it reached the road.) It was not lost then, but led straight across, through J. Hosmer's field and meadow again, and over ditch and up side-hill in the woods; and there, on the side of the hill, I could see where its tail had grazed the snow. It was then mixed with rabbit-tracks, but was easily unravelled. Passed out of the wood into J. P. Brown's land, over some mice or mole tracks, then over the middle of Brown's meadows westward, to Tarbell's meadows, till at last, by the brook, I found that it had had a companion up to that point, which turned off. Then I saw the large tracks of hounds on the trail. Still it held on, from straight across the road again, some way on an old dog's trail; had trodden and nosed very much about some hardhacks in the field beyond, where were a few mice-tracks, as if for food, the hound's tracks numerous with it; and so I traced it into the Ministerial Swamp, where, the snow-storm increasing, I left it, having traced it back more than a mile westward in a pretty direct course. What expeditions they make in a night in search of food! No doubt the same one crosses the river many times.

Shall we not have sympathy with the muskrat which

gnaws its third leg off, not as pitying its sufferings, but, through our kindred mortality, appreciating its majestic pains and its heroic virtue? Are we not made its brothers by fate? For whom are psalms sung and mass said, if not for such worthies as these? When I hear the church organ peal, or feel the trembling tones of the bass viol, I see in imagination the musquash gnawing off his leg, I offer up a note that his affliction may be sanctified to each and all of us. Prayer and praise fitly follow such exploits. I look round for majestic pains and pleasures. They have our sympathy, both in their joys and in their pains. When I think of the tragedies which are constantly permitted in the course of all animal life, they make the plaintive strain of the universal harp which elevates us above the trivial. When I think of the muskrat gnawing off his leg, it is as the plectrum on the harp or the bow upon the viol, drawing forth a majestic strain or psalm, which immeasurably dignifies our common fate. Even as the worthies of mankind are said to recommend human life by having lived it, so I could not spare the example of the muskrat.[1]

That sand foliage! It convinces me that Nature is still in her youth, — that florid fact about which mythology merely mutters, — that the very soil can fabulate as well as you or I. It stretches forth its baby fingers on every side. Fresh curls spring forth from its bald brow. There is nothing inorganic. This earth is not, then, a mere fragment of dead history, strata upon strata, like the leaves of a book, an object for a museum and an antiquarian, but living poetry, like the leaves of a tree, —

[1] [See *Journal*, vol. i, pp. 481, 482.]

not a fossil earth, but a living specimen. You may melt your metals and cast them into the most beautiful moulds you can; they will never excite me like the forms which this molten earth flows out into. The very earth, as well as the institutions upon it, is plastic like potter's clay in the hands of the artist. These florid heaps lie along the bank like the slag of a furnace, showing that nature is in full blast within;[1] but there is no admittance except on business. Ye dead and alive preachers, ye have no business here. Ye will enter only to your tomb.

I fear only lest my expressions may not be extravagant enough, — may not wander far enough beyond the narrow limits of our ordinary insight and faith, so as to be adequate to the truth of which I have been convinced. I desire to speak somewhere without bounds, in order that I may attain to an expression in some degree adequate to truth of which I have been convinced. From a man in a waking moment, to men in their waking moments. Wandering toward the more distant boundaries of a wider pasture. Nothing is so truly bounded and obedient to law as music, yet nothing so surely breaks all petty and narrow bonds. Whenever I hear any music I fear that I may have spoken tamely and within bounds. And I am convinced that I cannot exaggerate enough even to lay the foundation of a true expression.[2] As for books and the adequateness of their statements to the truth, they are as the tower of Babel to the sky.

[1] [*Walden*, pp. 340, 341; Riv. 476.]

[2] [*Walden*, p. 357; Riv. 499, 500.]

In Jones's account there is a paper headed —

"funerel Charges.

4 P Shug . . .
¼ of alspice
tobackoo
11 yd Cyprus
4 goze; hankerchiefs
4 Par of women black gloves
1½ yd Lutestring
silk feret
12 pair of mens white gloves
6 yards of allomode
silk"

The prices mostly cut off.

There was plainly much coopering done in those days.

How dangerous to the foxes and all wild animals is a light snow, accompanied and succeeded by calm weather, betraying their course to the hunters! Here was one track that crossed the road, — did not turn in it like a dog, — track of a wilder life. How distinct from the others! Such as was made before roads were, as if the road were [a] more recent track. This traveller does not turn when he strikes the trail of man. The fox that invaded the farmer's poultry-yard last night came from a great distance.

I followed on this trail so long that my thoughts grew foxy; though I was on the back track, I drew nearer and nearer to the fox each step. Strange as it may seem, I thought several times that I scented him, though I did not stoop.

Feb. 6. The weather has been very changeable for some weeks. First it is warm and thawing, sloshy weather; then the thermometer goes down to 19° below

zero, and our shoes squeak on the snow; then, perhaps, it moderates and snows; then is mild and pleasant again and good sleighing; then we wake to find a drifted snow upon the last and a bleak, wintry prospect.

P. M. — To Cliffs and Walden.

It is a very light snow and, though seven or eight inches deep, but a slight obstacle to walking. Its surface in the woods is everywhere creased and scored by the flitting leaves and the snow that has fallen from the trees. For a drifting wind has followed fast upon the snow, shaking it off the trees, and there is a new fall of withered leaves. Probably these leaves decay the faster for being deposited thus in successive layers, alternating with the snow.

From the Cliff Hill the landscape looks very bleak and Nova-Zembla-like. A cold, drifting wind sweeps from the north; the surface of the snow is imbricated on a great scale, being very regularly blown into waves, alike over the high road and the railroad, concealing the tracks and the meadow and the river and the pond. It is all one great wintry-looking snow-field, whose surface consists of great wave-like drifts, maybe twenty feet wide with an abrupt edge on the south. It is like a scaly armor drawn alike over the meadow and the pond. We need not trouble ourselves to speculate how the human race on this globe will be destroyed at last, whether by fire or otherwise. It would be so easy to cut their threads any time with a little sharper blast from the north. We go on dating from the Cold Fridays and the Great Snows and the September gales, but a little colder Friday, or greater snow, or more

violent gale would put a period to man's existence on the globe.[1]

I see great shadows on the northeast sides of the mountains, forty miles off, the sun being in the southwest. The snow is so light that few animals have been out. I see the track of a rabbit about the Cliff; there are hollows in the snow on the tops of the rocks, shaped like a milk-pan and as large, where he has squatted or whirled round. I also see the tracks of a few mice or moles. The squirrel, too, has been out. Hear the old owl at 4.30 P. M. Crossing Walden where the snow has fallen quite level, I perceive that my shadow [is of] a delicate or transparent blue rather than black.

Price on the Picturesque says, "The midsummer shoot is the first thing that gives relief to the eye, after the sameness of color which immediately precedes it; in many trees, and in none more than the oak, the effect is singularly beautiful; the old foliage forms a dark background, on which the new appears, relieved and detached in all its freshness and brilliancy: it is spring engrafted upon summer." Is not this the effect which I noticed by Fair Haven side last summer or autumn, toward night, — that watered and variously shaded foliage?

As for autumn, he speaks of "the warm haze, which, on a fine day in that season, spreads the last varnish over every part of the picture."

Gilpin talked as if there was some food for the soul in mere physical light and shadow, as if, without the suggestion of a moral, they could give a man pleasure or pain!

[1] [*Walden*, p. 280; Riv. 393, 394.]

Feb. 7. Under the waves of the snowy ocean yesterday, roads and rivers, pastures and cultivated fields, all traces of man's occupancy of the globe were for the most part concealed. Water and sand also assume this same form under the influence of wind. And I have seen, on the surface of the Walden ice, great sweeping, waving lines, somewhat like these. It is the track of the wind, the impress which it makes on flowing materials.

P. M. — Down river with C.

The river has not been so concealed by snow before. The snow does not merely lie level on it and on the land, so many inches deep, but great drifts, perchance beginning on the land, stretch quite across it, so that you cannot always tell where it is, for there is no greater levelness than elsewhere to betray it. In some places, where the ice is exposed, little bunches of hoar frost have formed, with perfect ribbed leaves one inch in diameter. This morning was one of the coldest in the winter. Does the whistle of the locomotive sound differently, tear the air any more, this weather? I see the prinos berries turned now a dark, coppery brown, looking blackish at a little distance. We crossed the Great Meadows lengthwise, a broad level plain, roughened only by snowy waves, about two miles long and nearly half as wide. Looking back over it made me think of what I have read of Arctic explorers travelling over snow-covered ice. Saw a few crows. Some green-briar berries quite fresh.

Made a fire on the snow-covered ice half a mile below Ball's Hill. Cut first a large bundle of green

oak twigs with leaves on them, laid them on sticks, then sprinkled on fine dead maple and alder and poplar twigs, and then dry cat-sticks of the same material. We broke up some larger pine trees by striking them on the ice, at the same time letting go to save our hands. Made a large warm fire, whose flame went up straight, there being no wind, and without smoke. Stayed half an hour, and when we took our departure, felt as if we had been in a house all the while, for we had been warm and had looked steadily at the fire instead of looking off. The fire made a large circular cavity in the snow and ice, three feet in diameter and four or five inches deep, with water at the bottom. We had often sailed over this very spot. Sticks in a circle on their ends and slanted over a common centre make a perfect fire. Such is the earliest hearth, with a hole in the roof above it. Our chimney fires are only semicircles or half-fires, or what is worse, oblong squares, or, in the case of stoves, mere boxes full of fire, without symmetry or form.

Observed in some large cakes of ice left on the river, I thought, the faintest possible tinge of green, also a white, leafy internal frostwork along the planes of the irregular flaring cleavages, — or call them deep conchoidal sometimes.

These afternoons the shadows of the woods have already a twilight length by 3 or 4 P. M. We made our fire in the shadow of a wood rather than in the sun, that the flame might show better, and the sun went down before we left it. Not till we had left our fire many rods behind did we observe the narrow column

of blue smoke rising straight from it against the wood. It had appeared to us pure flame, producing merely that boiling of the air above it through which you see objects confusedly.

Feb. 8. The poets, philosophers, historians, and all writers have always been disposed to praise the life of the farmer and prefer it to that of the citizen. They have been inclined to regard trade and commerce as not merely uncertain modes of getting a living, but as running into the usurious and disreputable. And even at the present day the trader, as carrier or go-between, the speculator, the forestaller, and corporations do not escape a fling. Trade has always been regarded to some extent as a questionable mode of getting a livelihood. Cato says: "Et virum bonum cum laudabant, ita laudabant, bonum agricolam, bonumque colonum. Amplissime laudari existimabatur, qui ita laudabatur. Mercatorem autem strenuum studiosumque rei quaerendae existimo; verum . . . periculosum et calamitosum. At ex agricolis et viri fortissimi, et milites strenuissimi gignuntur, maximeque pius quaestus, stabilissimusque consequitur, minimeque invidiosus: minimeque male cogitantes sunt, qui in eo studio occupati sunt." That is: "When they [*i. e.* our ancestors][1] praised a good man, they called him a good farmer and a good husbandman (settler?). He was thought to be most amply praised who was so praised. However, I think that the merchant is energetic and studious to make money, but his business is danger-

[1] [Supplied by Thoreau.]

ous and liable to misfortunes. But from the cultivators of the soil, both the men of most fortitude and the hardiest soldiers are descended, and theirs is a gain particularly just (honest, pious) and stable, and least of all the subject of envy: and they are the least of all thinking evil who are engaged in this pursuit."

And Varro says: "Viri magni nostri majores non sine causa praeponebant rusticos Romanos urbanis. Ut ruri enim, qui in villa vivunt ignaviores, quam qui in agro versantur in aliquo opere faciundo; sic qui in oppido sederent, quam qui rura colerent, desidiosiores putabant."[1] That is: "Great men, our ancestors, preferred Romans who had lived in the country to those who lived in the city. For, as in the country, they who live in the villa are idler than they who are employed in the field doing some work, so they thought that those who sat in a town were more slothful than they who cultivated the fields." And he says that they did not need the gymnasia of the Greeks, but now one does not think that he has a villa unless he has many places with Greek names in it, and, having stolen into the city, instead of using their hands in swinging (?) a scythe or holding a plow they move them in the theatre and circus and have forgotten husbandry.[2]

And in another place V. boasts of the antiquity of rustic life, saying that "there was a time when men cultivated the fields, but had no city (fuit tempus, cum rura colerent homines, neque urbem haberent)." And again: "Immani numero annorum urbanos agricolae

[1] *Vide* [p. 111].

[2] [A free rendering of Varro's Latin.]

praestant. Nec mirum, quod divina natura dedit agros, ars humana aedificavit urbes. (That is: Cultivators of the soil precede citizens by a vast number of years. Nor is it to be wondered at, for divine Nature gave fields, human art built cities.) . . . Nec sine causa Terram eandem appellabant matrem, et Cererem, et qui eam colerent, piam et utilem agere vitam credebant, atque eos solos reliquos esse ex stirpe Saturni regis. (That is: Nor without reason did they [our ancestors] call the same Earth mother and Ceres, and thought that they who cultivated it led a pious and useful life, and that they alone were left of the race of King Saturn.)"

But now, by means of railroads and steamboats and telegraphs, the country is denaturalized, the old pious, stable, and unenvied gains of the farmer are liable to all the suspicion which only the merchant's formerly excited. All milk-farms and fruit-farms, etc., are so many markets with their customs in the country.

Consider the deformities to which the farmer is liable, — the rustic, the clown (*a colono?*), the villain, etc., etc.

Josselyn, speaking of crickets, says, "The Italian who hath them cryed up and down the streets (*Grille che cantelo*) and buyeth them to put into his Gardens, if he were in New England would gladly be rid of them, they make such a dinn in an Evening." [1] I am more charmed by the Italian's taste than by Josselyn's impatience.

[1] [John Josselyn, *An Account of Two Voyages to New England*, p. 118.]

Ann, the Irishwoman who has lived with Deacon Brown so long, says that when he had taken to his bed with his last illness, she was startled by his calling, "Ann, Ann," "the bitterest Ann that you ever heard," and that was the beginning of his last illness.

On the 2d I saw the sand foliage in the Cut; pretty good. This is the frost coming out of the ground; this is spring. It precedes the green and flowery spring, as mythology does ordinary literature and poetry.[1]

P. M. — Rain, rain, rain, carrying off the snow and leaving a foundation of ice. The wind southeasterly.

Feb. 9. High wind in the night and now, the rain being over. Does it not usually follow rain-storms at this season, to dry up the water? It has cleared off very pleasant and is still quite warm.

9 A. M. — To Pine Hill.

Some of these thaws succeed suddenly to intensely cold weather, and the sky that was tense like a bow that is bent is now relaxed. There is a peculiar softness and luminousness in the air this morning, perhaps the light being diffused by vapor. It is such a warm, moist, or softened, sunlit air as we are wont to hear the first bluebird's warble in. And the brightness of the morning is increased tenfold by the sun reflected from broad sheets of rain and melted snow-water, and also, in a peculiar manner, from the snow on the sides of the Deep Cut. The crowing of cocks and the voices of the school-children sound like spring. I hear the sound of the horses' feet on the bared ice

[1] [*Walden*, p. 340; Riv. 476.]

as on pavements; and the sun is reflected from a hundred rippling sluices of snow-water finding its level in the fields. Are not both sound and light condensed or contracted by cold?

The jays are more lively than usual. That lichen with a white elastic thread for core is like a tuft of hair on the trees, sometimes springing from the centre of another, larger, flat lichen. There are snow-fleas, quite active, on the half-melted snow on the middle of Walden.

I do not hear Therien's axe far of late. The moment I came on his chopping-ground, the chickadees flew to me, as if glad to see me. They are a peculiarly honest and sociable little bird. I saw them go to his pail repeatedly and peck his bread and butter. They came and went a dozen times while I stood there. He said that a great flock of them came round him the other day while he was eating his dinner and lit on his clothes "just like flies." One roosted on his finger, and another pecked a piece of bread in his hand. They are considerable company for the woodchopper. I heard one wiry *phe-be*. They love to hop about wood freshly split. Apparently they do not leave his clearing all day. They were not scared when he threw down wood within a few feet of them. When I looked to see how much of his bread and butter they had eaten, I did not perceive that any was gone. He could afford to dine a hundred.

I see some chestnut sprouts with leaves on them still. The hollows about Walden, still bottomed with snow, are filled with greenish water like its own. I

do not find any willow catkins started, though many have lost their scales. I have brought home some alder and sweet-gale and put them in water. The black birch has a slender sharp bud, much like the shad-bush. In Stow's meadow by railroad causeway, saw many dusky flesh-colored, transparent worms, about five eighths of an inch long, in and upon the snow, crawling about. These, too, must be food for birds.

I have seen two red squirrels and heard a third since the snow covered the ground. I have seen one gray one, but traces of many.

After "putabant" in Varro, four pages back, comes "Itaque annum ita diviserunt, ut nonis modo diebus urbanas res usurparent, reliquis VII ut rura colerent. (Therefore they so divided the year as to attend to town affairs on the ninth day only, that they might cultivate the fields on the other days)." Hence *nundinae* means a fair, and *oppidum nundinarium* (a ninth-day town) is a market town, and *forum nundinarium* is the market-place.

Columella, referring to Varro, gives the same reason for the setting aside of the ninth day only, and adds: "Illis enim temporibus proceres civitatis in agris morabantur; et cum consilium publicum desiderabatur, a villis arcessebantur in senatum. Ex quo qui eos evocabant, Viatores nominati sunt. (For in those days the chief men of the state stayed on their farms; and when a public council was wanted they were sent for from their villas to the senate. Whence they who called them out were named Road-men.)" These were the times which all Romans loved to praise. But now, so far as the

rulers of the State are concerned, the city for the most part, instead of being a ninth-day town, gets six days, while the country gets only one day and the nights at most. We go to market every day. The city is not a ninth-day place but an every-day place, and the country is only a night or Sunday place. In a Yankee's estimation, it is perhaps the greatest satire on a New England country village to say that it has an air of quietness which reminds him of the Sabbath. He loves the bustle of a market, where things are bought and sold, and sometimes men among the rest. The boys swop jack-knives on Sunday, and their fathers, perchance, barter their own souls.

Howitt describes the harvest moon in August. Did I not put it in September? He speaks of "willow-holts on the banks of rivers." Bailey defines "holt, — a small wood or grove." Does not our "holt" on the river answer to this? It is in this case a poke-logan.[1]

My ink was frozen last month, and is now pale.

Howitt says that in Britain the law "is opposed to tracking game in a snow." I feel some pity for the wild animals when I see how their tracks betray them in calm weather after a snow-storm, and consider what risks they run of being exterminated.

Is not January alone pure winter? December belongs to the fall; is a wintry November: February, to the spring; it is a snowy March.

The water was several inches deep in the road last evening, but it has run nearly dry by morning. The illustrious farmer Romans who lived simply on their

[1] *Vide* Wright's *Dictionary of Provincialisms.*

land, to whom Columella refers, are Q. Cincinnatus, C. Fabricius, and Curius Dentatus.

Feb. 10. P. M. — Up railroad to Assabet and return *via* Hollowell place.

The river has risen again, and, instead of ice and snow, there is water over the ice on the meadows. This is the second freshet since the snows. The ice is cracked, and in some places heaved up in the usual manner. The sturdy white oak near the Derby railroad bridge has been cut down. It measures five feet and three inches over the stump, at eighteen inches from the ground. I observe the great well-protected buds of the balm-of-Gilead spear-head-like. There is no shine to them now, and their viscidness is not very *apparent.* A great many willow catkins show a little down peeping from under the points of the scales, but I have no doubt that all this was done last fall. I noticed it then.

Feb. 11. 7.30 A. M. — Snow-fleas lie in black patches like some of those dark rough lichens on rocks, or like ink-spots three or four inches in diameter, about the grass-stems or willows, on the ice which froze last night. When I breathe on them I find them all alive and ready to skip. Also the water, when I break the ice, arouses them. I saw yesterday, in a muddy spring in Tarbell's meadow, many cockle[*sic*]-shells on the bottom, with their feet out, and marks as if they had been moving.

When I read of the catkins of the alder and the

willow, etc., scattering their yellow pollen, they impress me as a vegetation which belongs to the earliest and most innocent dawn of nature; as if they must have preceded other trees in the order of creation, as they precede them annually in their blossoming and leafing. In the winter we so value the semblance of fruit that even the dry black female catkins of the alder are an interesting sight, not to mention, on shoots rising a foot or two above these, the red or mulberry male catkins, in little parcels, dangling at a less than right angle with the stems, and the short female ones at their bases. For how many æons did the willow shed its yellow pollen annually before man was created!

Apparently I read Cato and Varro from the same motives that Virgil did, and as I read the almanac, *New England Farmer*, or *Cultivator*, or Howitt's "Seasons."

Feb. 12. Another cold morning. The patches of snow-fleas on the ice are now much reduced, but still, when I kneel and breathe on them, they begin to skip, though the last two nights and all day yesterday have been severely cold. They look like little patches of rust on the ice.

At first, in clear cold weather, we may be walking on dry snow, which we cronch with squeaking sound under our feet. Then comes a thaw, and we slump about in slosh half a foot deep. Then, in a single night, the surface of the earth is all dried and stiffened, and we stagger over the rough, frozen ground and ice on which it is torture to walk. It becomes quite a study

how a man will shoe himself for a winter. For outdoor life in winter, I use three kinds of shoes or boots: first and chiefly, for the ordinary dry snows or bare ground, cowhide boots; secondly, for shallow thaws, half-shoe depth, and spring weather, light boots and india-rubbers; third, for the worst sloshy weather, about a week in the year, india-rubber boots.

P. M. — Skate to Pantry Brook.

Put on skates at mouth of Swamp Bridge Brook. The ice appears to be nearly two inches thick. There are many rough places where the crystals are very coarse, and the old ice on the river (for I spoke of a new ice since the freshet) is uneven and covered, more or less, with the scales of a thin ice whose water is dried up. In some places, where the wind has been strong, the foam is frozen into great concentric ridges, over which with an impetus I dash. It is hobbling and tearing work.

Just beyond the bathing-place, I see the wreck of an ice-fleet, which yesterday morning must have been very handsome. It reminds me of a vast and crowded fleet of sloops with large slanting sails all standing to the north. These sails

are, some of them, the largest specimens of the leaf-structure in ice that I have seen, eight or nine inches long. Perhaps this structure is more apparent now they have wasted so much. Their bases can be seen continuing quite through the level ice which has formed about them, as if the wind and waves, breaking up a thin ice, had held it in that position while it froze in.

One accustomed to glide over a boundless and variegated ice floor like this cannot be much attracted by tessellated floors and mosaic work. I skate over a thin ice all tessellated, so to speak, or in which you see the forms of the crystals as they shot. This is separated by two or three feet of water from the old ice resting on the meadow. The water, consequently, is not dark, as when seen against a muddy bottom, but a clear yellow, against which the white air-bubbles in and under the ice are very conspicuous.

Landed at Fair Haven Hill. I was not aware till I came out how pleasant a day it was. It was very cold this morning, and I have been putting [on] wood in vain to warm my chamber, and lo! I come forth, and am surprised to find it warm and pleasant. There is very little wind, here under Fair Haven especially. I begin to dream of summer even. I take off my mittens.

Here is a little hollow which, for a short time every spring, gives passage to the melting snow, and it was consequently wet there late into the spring. I remember well when a few little alder bushes, encouraged by the moisture, first sprang up in it. They now make a perfect little grove, fifteen feet high, and maybe half a dozen rods long, with a rounded outline, as if they were one mass of moss, with the wrecks of ferns in their midst and the sweet-fern about its edge. And so, perchance, a swamp is beginning to be formed. The shade and the decaying vegetation may at last produce a spongy soil, which will supply a constant rill. Has not something like this been the history of

the alder swamp and brook a little further along? True, the first is on a small scale and rather elevated, part way up the hill; and ere long trout begin to glance in the brook, where first was merely a course for melted snow which turned the dead grass-blades all one way, — which combed the grassy tresses down the hill.

This is a glorious winter afternoon. The clearness of a winter day is not impaired, while the air is still and you feel a direct heat from the sun. It is not like the relenting of a thaw with a southerly wind. There is a bright sheen from the snow, and the ice booms a little from time to time. On those parts of the hill which are bare, I see the radical leaves of the buttercup, mouse-ear, and the thistle.

Especially do gray rocks or cliffs with a southwest exposure attract us now, where there is warmth and dryness. The gray color is nowhere else so agreeable to us as in these rocks in the sun at this season, where I hear the trickling of water under great ice organ-pipes.

What a floor it is I glide thus swiftly over! It is a study for the slowest walker. See the shells of countless air-bubbles within and beneath it, some a yard or two in diameter. Beneath they are crowded together from the size of a dollar downward. They give the ice a white-spotted or freckled appearance. Specimens of every coin (*numismata*) from the first minting downward. I hear the pond faintly boom or mutter in a low voice, promising another spring to the fishes. I saw yesterday deeply scalloped oak leaves which

had sunk nearly an inch into the ice of Walden, making a perfect impression of their forms, on account of the heat they absorbed. Their route is thus downward to dust again, through water and snow and ice and every obstacle. This thin meadow ice with yellow water under it yields a remarkable hollow sound, like a drum, as I rip over it, as if it were about to give way under me, — some of that gong-like roar which I have described elsewhere, — the ice being tense. I crossed the road at Bidens Brook. Here the smooth ice was dusty (from the road) a great distance, and I thought it would dull my skates.

To make a perfect winter day like this, you must have a clear, sparkling air, with a sheen from the snow, sufficient cold, little or no wind; and the warmth must come directly from the sun. It must not be a thawing warmth. The tension of nature must not be relaxed. The earth must be resonant if bare, and you hear the lisping tinkle of chickadees from time to time and the unrelenting steel-cold scream of a jay, unmelted, that never flows into a song, a sort of wintry trumpet, screaming cold; hard, tense, frozen music, like the winter sky itself; in the blue livery of winter's band. It is like a flourish of trumpets to the winter sky. There is no hint of incubation in the jay's scream. Like the creak of a cart-wheel. There is no cushion for sounds now. They tear our ears.

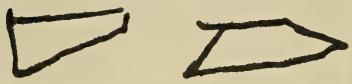
I frequently see three or four old white birches standing together on the edge of a pond or meadow, and am struck by the pleasing manner in which they will commonly be grouped, — how they spread so as

to make room for each other, and make an agreeable impression on the eye. Methinks I have seen groups of three in different places arranged almost exactly alike. I saw these near Lily Bay: The third upright one is lapped over and partly twined round the middle one at base.

Returning, I overhauled a muskrat-house by Bidens Brook. For want of other material, it was composed of grass, flags, and in a great measure (half) of twigs and sticks, mostly sweet-gale, both dead and alive, and roots, from six inches to two feet in length. These were, in fact, the principal material of it, and it was a large one, two feet above the ice. I was surprised to find that these sticks, both green and dead, had, the greater part of them, been gnawed off by the rat, — and some were nearly half an inch in diameter. They were cut off, not at a right angle with a smooth cut, but by successive cuts, smooth as with a knife, across, at the same time bending the twig down, which produced a sloping and, so to speak, terraced surface. I did not know before that they resembled the beaver in this respect also. It was chiefly the sweet-gale thus cut, commonly the top left on, two feet long, but sometimes cut off six inches long, thus: The bottom of its chamber was barely raised above the water, and the roof was hung with icicles from rain or frost.

The sun being low, I see as I skate, reflected from the surface of the ice, flakes of rainbow somewhat

like cobwebs, where the great slopes of the crystallization fall at the



right angle, six inches or a foot across, but at so small an angle with the horizon that they had seemed absolutely flat and level before. Think of this kind of mosaic and tessellation for your floor! A floor made up of surfaces not absolutely level,—though level to the touch of the feet and to the noonday eye,—composed of crystals variously set, but just enough inclined to reflect the colors of the rainbow when the sun gets low.

See where a muskrat yesterday brought up clams through a hole in the ice over the middle of the river, and left their great violet-tinted shells on the edge of the ice. Sometimes they break the hinge.

Cold as the morning has been, I find the water, as usual, overflowing the ice along the shore and about the willows and button-bushes. Apparently when the river freezes up thus tensely, the ice compresses it, and where the ice is held down near the shore and by the bushes, not being able to rise when the sun comes to warm the water, it bursts out and overflows in such places, even in very cold weather. At last, in warmer weather still, it is difficult to get on or off on this account.

The pond does not thunder every night, and I do not know its law exactly. I cannot tell surely when to expect its thundering, for it feels scarcely perceptible changes in the weather. Who would have suspected so large and cold and thick-skinned a thing to be so sensitive? Yet it has its law to which [it] thunders

obedience when it should, as surely as the buds expand in the spring. For the earth is all alive and covered with feelers of sensation, *papillæ*. The hardest and largest rock, the broadest ocean, is as sensitive to atmospheric changes as the globule of mercury in its tube. Though you may perceive no difference in the weather, the pond does.[1] So the alligator and the turtle, with quakings of the earth, come out of the mud.[2]

Feb. 13. *Monday.* 7 A. M. — To Walden.

A warm morning, overcast. The ice does not ring when I strike it with an axe. Tried to drive a stake in two places outside a wood, but found it frozen. Failed also in two places within the wood, but succeeded in a third.

P. M. — It snows again, spoiling the skating, which has lasted only one day. I do not remember the winter when the ice remained uncovered a week.

Feb. 14. P. M. — Down railroad.

A moist, thawing, cloudy afternoon, preparing to rain.

The telegraph resounds at every post. It is a harp with one string, — the first strain from the American lyre. In Stow's wood, by the Deep Cut, hear the *gnah gnah* of the white-breasted, black-capped nuthatch. I went up the bank and stood by the fence. A little family of titmice gathered about me, searching for their food both on the ground and on the trees, with great industry and intentness, and now and then

[1] [*Walden*, p. 333; Riv. 465.] [2] [*Walden*, p. 334; Riv. 467.]

pursuing each other. There were two nuthatches at least, talking to each other. One hung with his head down on a large pitch pine, pecking the bark for a long time, — leaden blue above, with a black cap and white breast. It uttered almost constantly a faint but sharp *quivet* or creak, difficult to trace home, which appeared to be answered by a baser and louder *gnah gnah* from the other. A downy woodpecker also, with the red spot on his hind head and his cassock open behind, showing his white robe, kept up an incessant loud tapping on another pitch pine. All at once an active little brown creeper makes its appearance, a small, rather slender bird, with a long tail and sparrow-colored back, and white beneath. It commences at the bottom of a tree and glides up very rapidly, then suddenly darts to the bottom of a new tree and repeats the same movement, not resting long in one place or on one tree. These birds are all feeding and flitting along together, but the chickadees are the most numerous and the most confiding. I observe that three of the four thus associated, *viz.* the chickadee, nuthatch, and woodpecker, have black crowns, at least the first two, very conspicuous black caps. I cannot but think that this sprightly association and readiness to burst into song has to do with the prospect of spring, — more light and warmth and thawing weather. The titmice keep up an incessant faint tinkling *tchip;* now and then one utters a lively *day day day*, and once or twice one commenced a gurgling strain quite novel, startling, and springlike. Beside this I heard the distant crowing of cocks and the divine harmony

of the telegraph, — all spring-promising sounds. The chickadee has quite a variety of notes. The *phebe* one I did not hear to-day.

I perceive that some of these pools by the Walden road which on the 9th looked so green have frozen blue.[1]

This greater liveliness of the birds methinks I have noticed commonly in warm, thawing days toward spring. F. Brown, who has been chasing a white rabbit this afternoon with a dog, says that they do not run off far, — often play round within the same swamp only, if it is large, and return to where they were started. Spoke of it as something unusual that one ran off so far that he could not hear the dogs, but he returned and was shot near where he started. He does not see their forms, nor marks where they have been feeding.

Feb. 16. By this time in the winter I do not look for those clear, sparkling mornings and delicate leaf frosts, which, methinks, occur earlier in the winter, as if the air of winter was somewhat tarnished and debauched, — had lost its virgin purity.

Every judgment and action of a man qualifies every other, *i. e.* corrects our estimate of every other, as, for instance, a man's idea of immortality who is a member of a church, or his praise of you coupled with his praise of those whom you do not esteem. For in this sense a man is awfully consistent, above his own consciousness. All a man's strength and all his weakness go to make up the authority of any particu-

[1] [See *Walden*, p. 327; Riv. 457.]

lar opinion which he may utter. He is strong or weak with all his strength and weakness combined. If he is your friend, you may have to consider that he loves you, but perchance he also loves gingerbread.

It must [be] the leaves of the *Chimaphila umbellata*, spotted wintergreen, which Channing left here day before yesterday.

I have not seen *F. hyemalis* since last fall, the snow buntings only during the great and severe snow-storm, no pine grosbeaks nor *F. linaria* this winter.

Snows again this morning. For the last month the weather has been remarkably changeable; hardly three days together alike.

That is an era not yet arrived, when the earth, being partially thawed, melts the slight snows which fall on it.

P. M. — To Walden and Flint's; return by Turnpike.

Saw two large hawks circling over the woods by Walden, hunting, — the first I have seen since December 15th. That Indian trail on the hillside about Walden was revealed with remarkable distinctness to me standing on the middle of the pond, by the slight snow which had lodged on it forming a clear white line unobscured by weeds and twigs. (For snow is a great revealer not only of tracks made in itself, but even in the earth before it fell.) It was quite distinct in many places where you would not have noticed it before. A light snow will often reveal a faint foot or cart track in a field which was hardly discernible before, for it reprints it, as it were, in clear white type, alto-

relievo.[1] Went to the locality of the *Chimaphila maculata* by Goose Pond.

Columella, after saying that many authors had believed that the climate ("qualitatem caeli statumque") was changed by lapse of time ("longo aevi situ"), refers to Hipparchus as having given out that the time would be when the poles of the earth would be moved from their place ("tempus fore, quo cardines mundi loco moverentur"); and, as confirmatory of this, he (C.) goes on to say that the vine and olive flourish now in some places where formerly they failed.

He gives the names of about fifty authors who had treated *de rusticis rebus* before him.

Feb. 17. P. M. — To Gowing's Swamp.

On the hill at the Deep Cut on the new road, the ground is frozen about a foot deep, and they carry off lumps equal nearly to a cartload at a time. Moore's man is digging a ditch by the roadside in his swamp. I am surprised to see that the earth there — under some snow, it is true — is frozen only about four inches. It may be owing to warm springs beneath. The hill was comparatively bare of snow (and of trees there) and was more exposed. The Irishman showed me small stumps, — larch, methinks, — which he dug and cut out *from the bottom* of the ditch, — very old ones. At Gowing's Swamp I see where some one hunted white rabbits yesterday, and perhaps the day before, with a dog. The hunter has run round and round it on firm ground, while the hare and dog

[1] [*Walden*, p. 200; Riv. 282.]

have cut across and circled about amid the blueberry bushes. The track of the white rabbit is gigantic compared with that of the gray one. Indeed few, if any (?), of *our* wild animals make a larger track with their feet alone. Where I now stand, the track of all the feet has an expanse of seven to fifteen inches, — this at intervals of from two to three feet, — and the width at the two fore feet is five inches. There is a considerable but slighter impression of the paw behind each foot.

The mice-tracks are very amusing. It is surprising how numerous they are, and yet I rarely ever see one. They must be nocturnal in their habits. Any tussocky ground is scored with them. I see, too, where they have run over the ice in the swamp, — there is a mere sugaring of snow on it, — ever trying to make an entrance, — to get beneath it. You see deep and distinct channels in the snow in some places, as if a whole colony had long travelled to and fro in them, — a highway, a well-known trail, — but suddenly they will come to an end; and yet they have not dived beneath the surface, for you see where the single traveller who did it all has nimbly hopped along as if suddenly scared, making but a slight impression, squirrel-like, on the snow. The squirrel also, though rarely, will make a channel for a short distance. These mice-tracks are of various sizes, and sometimes, when they are large and they have taken long and regular hops nine or ten inches apart in a straight line, they look at a little distance like a fox-track. I suspect that the mice sometimes build their nests in bushes from the foundation, for, in the swamp-hole on the new road,

where I found two mice-nests last fall, I find one begun with a very few twigs and some moss, close by where the others were, at the same height and also on prinos bushes, — plainly the work of mice wholly. In the open part of Gowing's Swamp I find the *Andromeda Polifolia*. Neither here nor in Beck Stow's does it grow very near the shore, in places accessible in wet weather. Some larch cones are empty, others contain seeds. In these swamps, then, you have three kinds of andromeda. The main swamp is crowded with high blueberry, panicled andromeda, prinos, swamp-pink, etc., etc. (I did not examine them particularly), and then in the middle or deepest part will be an open space, not yet quite given up to water, where the *Andromeda calyculata* and a few *A. Polifolia* reign almost alone. These are pleasing gardens.

In the early part of winter there was no walking on the snow, but after January, perhaps, when the snow-banks had settled and their surfaces, many times thawed and frozen, become indurated, in fact, you could walk on the snow-crust pretty well.

Feb. 18. P. M. — To Yellow Birch Swamp.

As I remember January, we had one (?) great thaw, succeeded by severe cold. It was harder getting about, though there may have been no more snow because it was light, and there was more continuous cold and clear sparkling weather. But the last part of January and all February thus far have been alternate thaw and freeze and snow. It has more thaws, even as the running "r" (root of ῥέω) occurs twice in it and but

once in January. I do not know but the more light and warmth plainly accounts for the difference. It does not take so much fuel to keep us warm of late. I begin to think that my wood will last. We begin to have days precursors of spring.

I see on ice by the riverside, front of N. Barrett's, very slender insects a third of an inch long, with grayish folded wings reaching far behind and two antennæ. Somewhat in general appearance like the long wasps. At the old mill-site, saw two pigeon woodpeckers dart into and out of a white oak. Saw the yellow under sides of their wings. It is barely possible I am mistaken, but, since Wilson makes them common in Pennsylvania in winter, I feel pretty sure. Such sights make me think there must be bare ground not far off south. It is a little affecting to walk over the hills now, looking at the reindeer lichens here and there amid the snow, and remember that ere long we shall find violets also in their midst. What an odds the season makes! The birds know it. Whether a rose-tinted water lily is sailing amid the pads, or Neighbor Hobson is getting out his ice with a cross-cut saw, while his oxen are eating their stalks. I noticed that the ice which Garrison cut the other day contained the lily pads and stems within it. How different their environment now from when the queenly flower, floating on the trembling surface, exhaled its perfume amid a cloud of insects! Hubbard's wooded hill is now almost bare of trees. Barberries still hang on the bushes, but all shrivelled. I found a bird's nest of grass and mud in a barberry bush filled full with them. It must have been done by

some quadruped or bird. The curls of the yellow birch bark form more or less parallel straight lines up and down on all sides of the tree, like parted hair blown aside by the wind, or as when a vest [*sic*] bursts and blows open. Rabbit-tracks numerous there, sometimes quite a highway of tracks over and along the frozen and snow-covered brook. How pleasant the sound of water flowing with a hollow sound under ice from which it has settled away, where great white air bubbles or hollows, seen through the ice and dark water, alternately succeed each other. The *Mitchella repens* berries look very bright amid the still fresh green leaves. In the birch swamp west of this are many red (?) squirrel nests high in the birches. They are composed within of fibres of bark. I see where the squirrels have eaten walnuts along the wall and left the shells on the snow.

Channing has some microscopic reading these days. But he says in effect that these works are purely material. The idealist views things in the large.

I read some of the speeches in Congress about the Nebraska Bill, — a thing the like of which I have not done for a year. What trifling upon a serious subject! while honest men are sawing wood for them outside. Your Congress halls have an ale-house odor, — a place for stale jokes and vulgar wit. It compels me to think of my fellow-creatures as apes and baboons.

What a contrast between the upper and under side of many leaves, — the indurated and colored upper side and the tender, more or less colorless under side, — male and female, — even where they are almost

equally exposed! The under side is commonly white, however, as turned away from the light toward the earth. Many in which the contrast is finest are narrow, revolute leaves, like the delicate and beautiful *Andromeda Polifolia*, the ledum, *Kalmia glauca*. De Quincey says that "the ancients had no experimental knowledge of severe climates." Neither have the English at home as compared with us of New England, nor we, compared with the Esquimaux.

This is a common form of the birch scale, — black, I think, — not white, at any rate.

The handsome lanceolate leaves of the *Andromeda Polifolia*, dark but pure and uniform dull red above, strongly revolute, and of a delicate bluish white beneath, deserve to be copied on to works of art.

Feb. 19. Many college text-books which were a weariness and a stumbling-block when *studied*, I have since read a little in with pleasure and profit. For several weeks the fall has seemed far behind, spring comparatively near. Yet I cannot say that there is any positive sign of spring yet; only we feel that we are sloping toward it. The sky has sometimes a warmth in its colors more like summer. A few birds have possibly strayed northward further than they have wintered.

P. M. — To Fair Haven by river, back by railroad.

Though the wind is cold, the earth feels the heat of the sun higher in the heavens and melts in plowed fields. The willow twigs rise out of the ice beside the river, the silvery down of each catkin just peeping

from under each scale in some places, — the work probably of last fall's sun, — like a mouse peeping from under its covert. I incline to walk now in swamps and on the river and ponds, where I cannot walk in summer. I am struck by the greenness of the green-briar at this season, still covering the alders, etc., twelve feet high and full of shining and fresh berries. The greenness of the sassafras shoots makes a similar impression.

The large moths apparently love the neighborhood of water, and are wont to suspend their cocoons over the edge of the meadow and river, places more or less inaccessible, to men at least. I saw a button-bush with what at first sight looked like the open pods of the locust or of the water asclepias attached. They were the light ash-colored cocoons of the *A. Promethea*, four or five, with the completely withered and faded leaves wrapped around them, and so artfully and admirably secured to the twigs by fine silk wound round the leaf-stalk and the twig, — which last add nothing to its strength, being deciduous, but aid its deception, — they are taken at a little distance for a few curled and withered leaves left on. Though the particular twigs on which you find some cocoons may never or very rarely retain any leaves, — the maple, for instance, — there are enough leaves left on other shrubs and trees to warrant their adopting this disguise. Yet it is startling to think that the inference has in this case been drawn by some mind that, as most other plants retain some leaves, the walker will suspect these also to. Each and all such disguises

and other resources remind us that not some poor worm's instinct merely, as we call it, but the mind of the universe rather, which we share, has been intended upon each particular object. All the wit in the world was brought to bear on each case to secure its end. It was long ago, in a full senate of all intellects, determined how cocoons had best be suspended, — kindred mind with mine that admires and approves decided it so.[1] The hips of the late rose, though more or less shrivelled, are still red and handsome. It outlasts other hips. The sweet-briar's have lost their color and begun to decay. The former are still very abundant and showy in perfect corymbs of a dozen or so amid the button-bushes. It might be called the water-rose. The trees in the maple swamp squeak from time to time like the first fainter sounds made by the red squirrel. I have little doubt the red squirrel must lay up food, since I see them so rarely abroad. On the cherry twigs you see the shining clasp of caterpillars' eggs. The snow not only reveals a track but sometimes hands it down to the ice that succeeds it. The sled-track which I saw in the slight snow over the ice here February 2d, though we have had many snows since and now there is no snow at all, is still perfectly marked on the ice.

Much study a weariness of the flesh, eh ? But did not they intend that we should read and ponder, who covered the whole earth with alphabets, — primers or bibles, — coarse or fine print ? The very débris of the cliffs — the stivers [?] of the rocks — are covered

[1] [Channing, p. 122.]

with geographic lichens: no surface is permitted to be bare long. As by an inevitable decree, we have come to times at last when our very waste paper is printed. Was not He who creates lichens the abettor of Cadmus when he invented letters? Types almost arrange themselves into words and sentences as dust arranges itself under the magnet. Print! it is a close-hugging lichen that forms on a favorable surface, which paper offers. The linen gets itself wrought into paper that the song of the shirt may be printed on it. Who placed us with eyes between a microscopic and a telescopic world?

There are so many rocks under Grape-vine Cliff that apparently for this reason the chopper saws instead of cuts his trees into lengths. The wood fern (*Dryopteris marginalis?*) still green there. And are they not small saxifrages so perfectly green and fresh, as if just started, in the crevices? I wait till sundown on Fair Haven to hear it boom, but am disappointed, though I hear much slight crackling. But, as for the previous cracking, it is so disruptive and produces such a commotion that it extends itself through snow-drifts six inches deep, and is even more distinct there than in bare ice, even to the sharpest angle of its forking. Saw an otter-track near Walden.

Feb. 20. Channing saw yesterday three little birds olive-green above, with yellowish-white breasts and, he thinks, bars on wings. Were they goldfinches?

P. M. — Skating to Fair Haven Pond.

Made a fire on the south side of the pond, using

canoe birch bark and oak leaves for kindlings. It is best to lay down first some large damp wood on the ice for a foundation, since the success of a fire depends very much on the bed of coals it makes, and, if these are nearly quenched in the basin of melted ice, there is danger that it will go out. How much dry wood ready for the hunter, inviting flames, is to be found in every forest, — dry bark fibres and small dead twigs of the white pine and other trees, held up high and dry as if for this very purpose! The occasional loud snapping of the fire was exhilarating. I put on some hemlock boughs, and the rich salt crackling of its leaves was like mustard to the ears, — the firing of uncountable regiments. Dead trees love the fire.

We skated home in the dusk, with an odor of smoke in our clothes. It was pleasant to dash over the ice, feeling the inequalities which we could not see, now rising over considerable hillocks, — for it had settled on the meadows, — now descending into corresponding hollows.

We have had but one [1] (and that I think was the first) of those gentle moist snows which lodge perfectly on the trees and make perhaps the most beautiful sight of any. Much more common is what we have now, *i. e.* —

Feb. 21. A. M. — A fine, driving snow-storm.

Have seen no good samples of the blue in snow this winter. At noon clears up.

P. M. — To Goose Pond by Tuttle Path.

[1] No more this winter.

A little snow, lodged on the north side of the woods, gives them a hoary aspect, — a mere sugaring, however. The snow has just ceased falling — about two inches deep, in the woods, upon the old and on bare ground; but there is scarcely a track of any animal yet to be seen, except here and there the surface of the snow has been raised and broken interruptedly where some mouse came near the surface in its travels, and in one wood I see very numerous tracks, probably of red squirrels, leading to and from three or four holes in the earth close together, somewhat like those in an ant's nest, — quite a broad beaten path to some stumps with white pine cones on them and single tracks to the base of trees. It has now got to be such weather that after a cold morning it is colder in the house, — or we feel colder, — than outdoors, by noon, and are surprised that it is no colder when we come out. You cannot walk too early in new-fallen snow to get the sense of purity, novelty, and unexploredness. The snow has lodged more or less in perpendicular lines on the northerly sides of trees, so that I am able to tell the points of compass as well as by the sun. I guide myself accordingly. It always gladdens me to see a willow, though catkinless as well as leafless, rising above the new-fallen, untrodden snow, in some dry hollow in the woods, for then I feel nearer to spring. There are some peculiarly dry and late looking ones I see there, but it is enough that they are willows. The locust pods are open or opening. Little beans they hold. What delicate satin-like inside linings they have!

The difference between the white and black (?) birch scales (*vide* [p. 130]) is that the wings of the first are curved backward like a real bird's. The seeds of this also are broadly winged like an insect with two little antennæ. The ice in the fields by the poorhouse road — frozen puddles — amid the snow, looking westward now while the sun is about setting, in cold weather, is green.

Montanus in his account of New Netherland (Amsterdam, 1671), speaking of the beaver, says, "The wind-hairs which rise glittering above the back fall off in the summer and grow again in the fall."

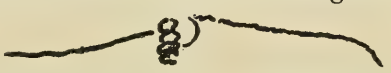
Feb. 22. I measured the thickness of the frozen ground at the deep cut on the new Bedford road, about half-way up the hill. They dig under the frozen surface and then crack it off with iron wedges, with much labor, in pieces from three to six feet square. It was eighteen inches thick and more there — thicker higher up, not so thick lower down the hill.

Saw in Sleepy Hollow a small hickory stump, about six inches in diameter and six inches high, so completely, regularly, and beautifully covered by that winkle-like fungus in concentric circles and successive layers that the core was concealed and you would have taken it for some cabbage-like plant. This was the way the wound was healed. The cut surface of the stump was completely and thickly covered. Our neighbor Wetherbee was J. Moore's companion when he took that great weight of pickerel this winter. He says it was fifty-six pounds in Flint's, in

one day, and that four of them weighed eighteen pounds and seven ounces. My alder catkins in the pitcher have shed their pollen for a day or two, and the willow catkins have pushed out half an inch or more and show red and yellowish.

Feb. 23. A. M. — The snow drives horizontally from the north or northwesterly, in long waving lines like the outline of a swell or billow. The flakes do not fall perceptibly for the width of a house.

P. M. — Saw some of those architectural drifts forming. The fine snow came driving along over the field like steam curling from a roof. As the current rises to go over the wall, it produces a lull in the angle made by the wall and ground, and accordingly just enough snow is deposited there to fill the triangular calm, but the greater part passes over and



is deposited in the larger calm. A portion of the wind also apparently passes through the chinks of the wall and curves upward against the main drift, appearing to carve it and perforate it in various fashion, holding many snowy particles in suspension in vertical eddies. I am not sure to what extent the drift is carved and perforated, and to what originally deposited, in these forms. How will it look behind a tight fence?

Not that ornamental beauty is to be neglected, but, at least, let it first be inward-looking and essential, like the lining of a shell, of which the inhabitant is unconscious, and not mere outside garnishing.

This forenoon a driving storm, very severe. This afternoon fair, but high wind and drifting snow.

Feb. 24. P. M. — To Walden and Fair Haven.

In Wheeler's Wood by railroad. Nuthatches are faintly answering each other, — tit for tat, — on different keys, — a faint creak. Now and then one utters a loud distinct *gnah*. This bird more than any I know loves to stand with its head downward.

Meanwhile chickadees, with their silver tinkling, are flitting high above through the tops of the pines. Measured the ice of Walden in three places, —

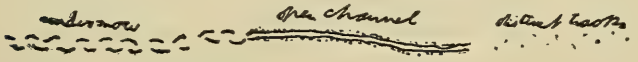
One about 10 rods from the shore, $16\frac{3}{4}$ inches thick
25 rods from the shore, " " "
In middle . . . . . $17\frac{1}{4}$ " "

Call it then 17 inches on an average. On Fair Haven, in the only place tried, it was 21 inches thick. The portion of the ice in Walden above water was *about* $1\frac{1}{4}$ inches, in Fair Haven *about* $1\frac{3}{4}$. This part then equals $\frac{1}{13}+$ and $\frac{1}{12}$ respectively.

Tried the frost in five different and very *distant* woods in my walk. Found that though the ground is frozen more than 18 inches — from 18 [inches] to $2\frac{1}{2}$ feet — thick on the open hillside on the new Bedford road, notwithstanding some snow on it, I can drive a stake without any trouble in the midst of ordinary level mixed pine and oak woods where the snow is a foot deep, in *very thick* pine and oak woods where the snow is only one inch thick or none at all, and the ground does not slope to the north and east, and probably the northwest, and in sprout-lands where it is 20 inches

thick in some places, and in springy meadows. In Moore's Swamp it is frozen about 4 inches deep in open land. I think that in an average year the ice in such a pond as Fair Haven attains a greater thickness than the snow on a level. The other day I thought that I smelled a fox very strongly, and went a little further and found that it was a skunk. May not their odors differ in intensity chiefly? Observed in one of the little pond-holes between Walden and Fair Haven where a partridge had travelled around in the snow amid the bordering bushes twenty-five rods, had pecked the green leaves of the lambkill and left fragments on the snow, and had paused at each high blueberry bush, fed on its red buds and shaken down fragments of its bark on the snow. These buds appeared its main object. I finally scared the bird.

I see such mice or mole tracks as these:—



The frozen earth at the new road cut is hauled off twenty rods by chains hooked round it, and it lies like great blocks of yellow sandstone for building, cracked out exactly square by wedges. The sexton tells me that he had to dig the last grave through two feet of frozen ground. I measured a block to-day two feet five inches thick after being dragged a dozen rods.

Feb. 26. Kane, ashore far up Baffin's Bay, says, "How strangely this crust we wander over asserts its identity through all the disguises of climate!"

Speaking of the effects of refraction on the water, he says: "The single repetition was visible all around us; the secondary or inverted image sometimes above and sometimes below the primary. But it was not uncommon to see, also, the uplifted ice-berg, with its accompanying or false horizon, joined at its summit by its inverted image, and then above a second horizon, a third berg in its natural position." He refers to Agassiz at Lake Superior as suggesting "that it may be simply the reflection of the landscape inverted upon the surface of the lake, and reproduced with the actual landscape;" though there there was but one inversion.

He says that he saw sledge-tracks of Franklin's party in the neighborhood of Wellington Sound, made on the snow, six years old, which had been covered by the after-snows of five winters. This reminds me of the sled-tracks I saw this winter.

Kane says that, some mornings in that winter in the ice, they heard "a peculiar crisping or crackling sound." "This sound, as the 'noise accompanying the aurora,' has been attributed by Wrangell and others, ourselves among the rest, to changes of atmospheric temperature acting upon the crust of the snow." Kane thinks it is rather owing "to the unequal contraction and dilatation" of unequally presenting surfaces, "not to a sudden change of atmospheric temperature acting upon the snow." Is not this the same crackling I heard at Fair Haven on the 19th, and are not most of the arctic phenomena to be witnessed in our latitude on a smaller scale? At Fair Haven it seemed a slighter contraction of the ice, — not enough to make it thunder.

This morning it began with snowing, turned to a fine freezing rain producing a glaze, — the most of a glaze thus far, — but in the afternoon changed to pure rain.

P. M. — To Martial Miles's in rain.

The weeds, trees, etc., are covered with a glaze. The blue-curl cups are overflowing with icy drops. All trees present a new appearance, their twigs being bent down by the ice, — birches, apple trees, etc., but, above all, the pines. Tall, feathery white pines look like cockerels' tails in a shower. Both these and white [= pitch] pines, their branches being inclined downward, have sharpened tops like fir and spruce trees. Thus an arctic effect is produced. Very young white and pitch pines are most changed, all their branches drooping in a compact pyramid toward the ground except a single plume in the centre. They have a singularly crestfallen look. The rain is fast washing off all the glaze on which I had counted, thinking of the effect of to-morrow's sun on it. The wind rises and the rain increases. Deep pools of water have formed in the fields, which have an agreeable green or blue tint, — sometimes the one, sometimes the other. Yet the quantity of water which is fallen is by no means remarkable but, the ground being frozen, it is not soaked up. There is more water on the surface than before this winter.

Feb. 27. Morning. — Rain over; water in great part run off; wind rising; river risen and meadows flooded. The rain-water and melted snow have run swiftly over

the frozen ground into the river, and raised it with the ice on it and flooded the meadows, covering the ice there which remains on the bottom; so that you have, on the male side, the narrow canal above the ice, then a floating ice everywhere bridging the river, and then a broad meadowy flood above ice again.

Those blocks of frozen earth at the new road cut are in fact a sandstone whose cement is frost. They are dragged by chains about them (and no drag), without losing any appreciable part, for twenty rods, and have preserved their form — their right-angled edges — for a month, left to thaw on the sides of the New Road embankments.

I remarked yesterday the rapidity with which water flowing over the icy ground sought its level. All that rain would hardly have produced a puddle in midsummer, but now it produces a freshet, and will perhaps break up the river.

It looks as if Nature had a good deal of work on her hands between now and April, to break up and melt twenty-one inches of ice on the ponds, — beside melting all the snow, — and before planting-time to thaw from one to two and a half or three feet of frozen ground.

They who live in the outskirts of the town do not like to have woods very near their houses, but cut them down. They are more of a bugbear than an ornament in their eyes. They who live on the village street take still more pains to rear a pine grove about their houses.

The ground being frozen, I saw the rain yesterday dripping or streaming from the edge of the bank at

the base of the wooded hill beyond William Wheeler's as from the eaves of a house, and to-day the bank is lined with icicles.

P. M. — To Flint's Pond.

Savin Wood. — Rufus Hosmer accounts for a wooden pin confining a tenon in its mortise gradually working out, — as in a gate for instance, (and this was the case on both sides of R. W. E.'s gate, to which he stepped for illustration), — by saying that, when the whole gate was wet and swelled perhaps a sixteenth of an inch, it carried the pin along with it and shrinking left it there, then swelled again and carried it a sixteenth of an inch further and left it there again, and so finally perhaps dropped it out. Among the savins I saw where rabbits had gnawed many barberry bushes, showing the yellow, and had eaten off many twigs some half an inch in diameter, also young hickories, and had gnawed off and eaten their twigs too in many places, hard as they are. They looked as if a moose had browsed them. *One* small pitch pine had lost some twigs too. I also saw where one which I scared had dropped some umbelled pyrola leaves — or it *may* have been another creature — and had eaten off some green rose-briar shoots. This gray rabbit's tail was very short, and white beneath, and curved short over his back in running. Sportsmen speak of the deer's "white flag."

Feb. 28. A pleasant morning.

What is the cause of that half ice, half water, along

the edge of the river now, of the consistency of molasses or soft solder? I can think of no peculiarity in its formation unless that this water, the river rising, has flowed out over the ice in the night faster than it froze. Stirred with a stick, it shows a mass of crystals.

Probably you can study the habits of rabbits, partridges, etc., more easily in the winter, their tracks being revealed by the snow.

This is now another rise of the river. I see that the ice in hollows in the fields breaks up (partially) in the same manner with that on the river, *viz.* around the shore it is covered with water and rests on the bottom, while the middle is raised with the water, and hence a ridge is heaved up where the two ices meet. I am not certain how far this overflowing of the ice next the shore or on the meadows may be owing to the flood from the hills in the first instance running over, then under it and keeping it down, as well as to its adhesion to the bottom.

F. Brown tells me that he found a quantity of wintergreen in the crop of a partridge. I suggested that it *might* be lambkill.

IV

MARCH, 1854

(ÆT. 36)

March 1. Here is our first spring morning according to the almanac. It is remarkable that the spring of the almanac and of nature should correspond so closely. The morning of the 26th was good winter, but there came a plentiful rain in the afternoon, and yesterday and to-day are quite springlike. This morning the air is still, and, though clear enough, a yellowish light is widely diffused throughout the east, now just after sunrise. The sunlight looks and feels warm, and a *fine* vapor fills the lower atmosphere. I hear the phœbe or spring note of the chickadee, and the scream of the jay is perfectly repeated by the echo from a neighboring wood. For some days past the surface of the earth, covered with water, or with ice where the snow is washed off, has shone in the sun as it does only at the approach of spring, methinks. And are not the frosts in the morning more like the early frosts in the fall, — common white frosts?

As for the birds of the past winter: I have seen but three hawks, — one early in the winter and two lately; have heard the hooting owl pretty often late in the afternoon. Crows have not been numerous, but their cawing was heard chiefly in pleasanter mornings.

Blue jays have blown the trumpet of winter as usual, but they, as all birds, are most lively in springlike days. The chickadees have been the *prevailing* bird. The partridge common enough. One ditcher tells me that he saw two robins in Moore's Swamp a month ago. I have not seen a quail, though a few have been killed in the thaws. Four or five downy woodpeckers. The white-breasted nuthatch four or five times. Tree sparrows one or more at a time, oftener than any bird that comes to us from the north. Two pigeon woodpeckers, I think, lately. One dead shrike, and perhaps one or two live ones. Have heard of two white owls, — one about Thanksgiving time and one in midwinter. One short-eared owl in December. Several flocks of snow buntings for a week in the severest storm, and in December, last part. One grebe in Walden just before it froze completely. And two brown creepers once in middle of February. Channing says he saw a little olivaceous-green bird lately. I have not seen an *F. linaria*, nor a pine grosbeak, nor an *F. hyemalis* this winter, though the first was the prevailing bird last winter.

In correcting my manuscripts, which I do with sufficient phlegm, I find that I invariably turn out much that is good along with the bad, which it is then impossible for me to distinguish — so much for keeping bad company; but after the lapse of time, having purified the main body and thus created a distinct standard for comparison, I can review the rejected sentences and easily detect those which deserve to be readmitted.

P. M. — To Walden *via* R. W. E.'s.

I am surprised to see how bare Minott's hillside is already. It is already spring there, and Minott is puttering outside in the sun. How wise in his grandfather to select such a site for a house, the summers he has lived have been so much longer! How pleasant the calm season and the warmth — the sun is even like a burning-glass on my back — and the sight and sound of melting snow running down the hill! I look in among the withered grass blades for some starting greenness. I listen to hear the first bluebird in the soft air. I hear the dry clucking of hens which have come abroad.

The ice at Walden is softened, — the skating is gone; with a stick you can loosen it to the depth of an inch, or the first freezing, and turn it up in cakes. Yesterday you could skate here; now only close to the south shore. I notice the redness of the andromeda leaves, but not so much as once. The sand foliage is now in its prime.

March 2. A Corner man tells me that Witherell has seen a bluebird, and Martial Miles thought that he heard one. I doubt it. It may have been given to Witherell to see the first bluebird, so much has been withholden from him.

What produces the peculiar softness of the air yesterday and to-day, as if it were the air of the south suddenly pillowed amid our wintry hills? We have suddenly a different sky, — a different atmosphere. It is as if the subtlest possible soft vapor were diffused through the atmosphere. Warm air has come to us

from the south, but charged with moisture, which will yet distill in rain or congeal into snow and hail.

The sand foliage is vital in its form, reminding me [of] what are called the vitals of the animal body. I am not sure that its arteries are ever hollow. They are rather meandering channels with remarkably distinct sharp edges, formed instantaneously as by magic. How rapidly and perfectly it organizes itself! The material must be sufficiently cohesive. I suspect that a certain portion of clay is necessary. Mixed sand and clay being saturated with melted ice and snow, the most liquid portion flows downward through the mass, forming for itself instantly a perfect canal, using the best materials the mass affords for its banks. It digs and builds it in a twinkling. The less fluid portions clog the artery, change its course, and form thick stems and leaves. The lobe principle, — lobe of the ear (*labor, lapsus?*).

On the outside all the life of the earth is expressed in the animal or vegetable, but make a deep cut in it and you find it vital; you find in the very sands an anticipation of the vegetable leaf. No wonder, then, that plants grow and spring in it. The atoms have already learned the law. Let a vegetable sap convey it upwards and you have a vegetable leaf. No wonder that the earth expresses itself outwardly in leaves, which labors with the idea thus inwardly. The overhanging leaf sees here its prototype. The earth is pregnant with law.

The various shades of this sand foliage are very agreeable to the eye, including all the different colors

which iron assumes, — brown, gray, yellowish, reddish, and clay-color. Perhaps it produces the greater effect by arranging the sands of the same color side by side, bringing them together.[1]

March 4. A dull, cloudy day.

P. M. — To Walden *via* Hubbard's Wood and foot of Cliff Hill.

The snow has melted very rapidly the past week. There is much bare ground. The checkerberries are revealed, — *somewhat* shrivelled many of them. I look along the ditches and brooks for tortoises and frogs, but the ditches are still full of dirty ice, and they are not yet seen in the brooks. In Hubbard's maple swamp I see the evergreen leaves of the gold-thread as well as the mitchella and large pyrola. I begin to sniff the air and smell the ground. In the meadow beyond I see some still fresh and perfect pitcher-plant leaves, and everywhere the green and reddish radical leaves of the golden senecio, whose fragrance when bruised carries me back or forward to an incredible season. Who would believe that under the snow and ice lie still — or in midwinter — some green leaves which, bruised, yield the same odor that they do when their yellow blossoms spot the meadows in June? Nothing so realizes the summer to me now. This past winter the sphagnum (?) in swamps and meadows has been frost-bitten and blackened, but last winter it was fresh and handsome. I see nowadays, the ground being laid bare, great cracks in the earth revealed, a third of an

[1] [*Walden*, pp. 337–339; Riv. 471, 472, 474.]

inch wide, running with a crinkling line for twenty rods or more through the pastures and under the walls, — frost-cracks of the past winter. Sometimes they are revealed through ice four or five inches thick over them. I observed to-day where a crack had divided a piece of bark lying over it with the same irregular and finely meandering line, *sometimes* forking. Yesterday I saw a wasp slowly stretching himself and, I think, a fly, outside of Minott's house in the sun, by his wood-shed. In the dry pasture under the Cliff Hill, the radical leaves of the johnswort are now revealed everywhere in pretty radiating wreaths flat on the ground, with leaves recurved, reddish above, green beneath, and covered with dewy drops. I can no longer get on to the river ice. I do not find any willow catkins started. A red maple which I cut bleeds somewhat, — only the upper side the cut however. Is not this the earliest distinct motion of the spring? This stood in water. Other trees were dry. Found a geiropodium (?), its globe now transparent, with the vermilion-colored remnants of others (?) lying in jelly about. In dry pastures I see that fungus — is it? — split into ten or twelve rays like a star and curved backward around a white bag or inner membrane. Were they not the seeds of rose-hips which I saw abundantly in some creature's dung? The various cladonias are now very plump and erect, not only exposed to view, the ground being bare, but flourishing on account of the abundant moisture, — some light, some dark green, and various more dusky shades.

In one or two places on the snow under the Cliffs I noticed more than a half-pint of partridge-droppings within a diameter of six inches. Were these all dropped in one night by one bird, or in the course of several nights, or by many birds? I saw that they had eaten the buds of the small blueberry *vacillans*. In their manure was what looked like woody fibres; may have been fibres of leaves. I am surprised to see how fresh and tender is the wintergreen bud, almost pure white. Was it so two months ago? It looks as if it had started under the snow. What is that gray beetle of which I found many under the bark of a large dead white pine, five eighths of an inch long, within an elliptical sort of log fort seven eighths of an inch or more in diameter piled around, of fibres of the sap-wood, perhaps one eighth or one tenth of an inch high, with some red bark chankings? Sometimes a curious chrysalis instead, like a very narrow and long bandbox with flat and parallel top and bottom, but highest at one end like a coffin. Also some white grubs stretch themselves, and some earwig-shaped creatures under the bark. I find that the ice of Walden has melted or softened so much that I sink an inch or more at every step, and hardly anywhere can I cut out a small cake, the water collects so fast in [the] hole. But at last, in a harder and drier place, I succeeded. It was now fifteen and a half inches thick, having lost about an inch and a half. Though the upper side was white and rotten and saturated with water for four or five inches, the under surface was still perfectly smooth and so far unchanged, yet ready to flake off, and did so readily in my hand, in

flakes a half-inch to an inch thick, leaving the irregular, undulating surface with which I am familiar. But this side was comparatively unchanged and hard, though for two and three quarters inches, measuring upwards, it was whitish, then for two and a half inches remarkably clear (free from air-bubbles) and hard. Then by successive layers it grew more white and soft till you reached the upper surface. I think that that slight white ice beneath the clear and dark may have been produced by the recent warmth of the water, though this is doubtful. At any rate this year the ice has melted *much* more above than beneath. Least of all between two and three quarters and five inches from the under side.

March 5. Sunday. Channing, talking with Minott the other day about his health, said, "I suppose you 'd like to die now." "No," said Minott, "I 've toughed it through the winter, and I want to stay and hear the bluebirds once more."

The patches of bare ground grow larger and larger, of snow less and less; even after a night you see a difference. It is a clear morning with some wind beginning to rise, and for the first time I see the water looking blue on the meadows.

Has not the johnswort two lives, in winter sending out radical shoots which creep flat on the ground under the snow, in the summer shooting upward and blossoming?

P. M. — To Upper Nut Meadow.

The river is breaking up. The meadows are already

partly bare, for it has only been cold enough to form a thin ice on them since this last freshet, and the old ice still lies concealed on the bottom. Great fields of thick ice from the channel, or between the channel and meadows, are driven by the wind against the thick ice on the channel. Hence the meadow ice *appears* to break up first. The waves dash against the edge of the ice and eat into it fast.

As I go along on the snow under Clamshell Hill I hear it sing around me, being melted next the ground. This is a spring sound. I cannot yet see the marchantia (?) in the ditches, for they are yet filled with ice or flooded. I see no horse-tail (unless one) nor flags, etc., yet started in Nut Meadow, nor any minnows out. This brook has run clear of ice a long time. Near Jenny's its sides are strewn with the wreck of angelica stems and asters. I go along looking at its deep, sometimes yellow, shelving bottom, sprinkled with red pebbles. In the upper meadow the sweet-gale grows rankly along its edges, slanted over the water almost horizontally, so as frequently to meet and conceal it altogether. It is here a dark and sluggish water, comparatively shallow, with a muddy bottom. This sweet-gale is now full of fruit. This and the water andromeda are wild plants, as it were driven to the water's edge by the white man. Saw a wood tortoise at the bottom. A reptile out of the mud before any bird, and probably quadruped. Not yet a frog, I think. The down of some willow catkins by this brook *may have* started forward this spring, though it is doubtful. Those which look most forward now will not be

so a fortnight hence. It grew colder before I left. I saw some crystals beginning to shoot on the pools between the tussocks, shaped like feathers or fan-coral, — the most delicate I ever saw. Thus even ice begins with crystal leaves, and birds' feathers and wings are leaves, and trees and rivers with intervening earth are vast leaves.

Saw a small blackish caterpillar on the snow. Where do they come from? And crows, as I think, migrating northeasterly. They came in loose, straggling flocks, about twenty to each, commonly silent, a quarter to a half a mile apart, till four flocks had passed, and perhaps there were more. Methinks I see them going southwest in the fall.

March 6. A cool morning. The bare water here and there on the meadow begins to look smooth, and I look to see it rippled by a muskrat. The earth has to some extent frozen dry, for the drying of the earth goes on in the cold night as well as the warm day. The alders and hedgerows are still silent, emit no notes.

P. M. — To Goose Pond.

According to G. Emerson, maple sap sometimes begins to flow in the middle of February, but usually in the second week of March, especially in a clear, bright day with a westerly wind, after a frosty night. The brooks — the swift ones and those in swamps — open before the river; indeed some of the first have been open the better part of the winter. I saw trout glance in the Mill Brook this afternoon, though near its sources, in Hubbard's Close, it is still covered with

dark, icy snow, and the river into which it empties has not broken up. Can they have come up from the sea? Like a film or shadow they glance before the eye, and you see where the mud is roiled by them. Saw children checkerberrying in a meadow. I see the skunk-cabbage started about the spring at head of Hubbard's Close, amid the green grass, and what looks like the first probing of the skunk. The snow is now all off on meadow ground, in thick evergreen woods, and on the south sides of hills, but it is still deep in sprout-lands, on the north sides of hills, and generally in deciduous woods. In sprout-lands it is melted beneath, but upheld by the bushes. What bare ground we have now is due then not so much to the increased heat of the sun and warmth of the air as to the little frost there was in the ground in so many localities. This remark applies with less force, however, to the south sides of hills. The ponds are hard enough for skating again. Heard and saw the first blackbird, flying east over the Deep Cut, with a *tchuck*, *tchuck*, and finally a split whistle.

March 7. P. M. — To Annursnack.

I did not mention the drifts yesterday. Most of the snow left on bare, dry level ground consists of the remains of drifts, particularly along fences, — most on the south side. Also much that looks like snow is softened ice in the lower parts of fields. Looking from Annursnack, there is no perceptible difference as to snow between the north and south prospects, though the north one is not extensive; but the snowiest view is westward. Has this anything to do with there being

most snow inland? All the sides of steep hills are likely to be bare, washed bare by rain (?). I do not know why there should be so much snow in sprout-lands and deciduous woods, unless it is because the sun has had less chance to thaw the frosts which yet have been thick there.

It is remarkable how true each plant is to its season. Why should not the fringed gentian put forth early in the spring, instead of holding in till the latter part of September? I do not perceive enough difference in the temperature. How short a time it is with us! I see many little white or dirty white puffballs, yellowish inside, commonly less than an inch in diameter, on bare cultivated fields, and, in pastures, some great chocolate-colored ones (within). Both yield their dust. Heard the first bluebird, — something like *pe-a-wor*, — and then other slight warblings, as if farther off. Was surprised to see the bird within seven or eight rods on the top of an oak on the orchard's edge under the hill. But he appeared silent, while I heard others faintly warbling and twittering far in the orchard. When he flew I heard no more, and then I suspected that he had been ventriloquizing; as if he hardly dared open his mouth yet, while there was so much winter left. It is an overcast and moist but rather warm afternoon. He revisits the apple trees, and appears to find some worms. Probably not till now was his food to be found abundantly. Saw some fuzzy gnats in the air. Saw where a partridge had been eating many prinos berries, now black and shrivelled. I suspect that they devour a great bulk, which has but

little nutriment. The radical leaves of the pinweeds are like the johnswort with leaves reflexed, — most of them closer and finer. They appear unaffected by frost. The radical leaves of the crowfoot everywhere are the commonest green, as soon as the snow goes off. You can hardly tell when it begins to spring. Saw mountain cranberry near Brooks's pigeon-place, very flat on the pasture, raying out from a centre six feet each way, more than three quarters of an inch thick in the middle. Did not know it was so woody. This one of the *winter-reds*, perfectly fresh and glossy. The river *channel* is nearly open everywhere. Saw, on the alders by the riverside front of Hildreth's, a song sparrow, quirking its tail. It flew across the river to the willows, and soon I heard its well-known dry *tchip, tchip*. Saw, methinks, what I called ephemeræ last spring, — one on the water, three quarters of an inch long, narrow, gray-winged, several segments [?] curved on the back.

On winter-rye field, top of Annursnack, what looked like a *very large* hard core of a buttonwood ball — same color. Broke it with a stone and found it full of dark earth. Was it not my pigeon's-egg fungus turned dark and hardened?

March 8. Steady rain on the roof in the night, suggesting April-like warmth. This will help melt the snow and ice and take the frost out of the ground.

What pretty wreaths the mountain cranberry makes, curving upward at the extremity! The leaves are now a dark, glossy red, and wreath and all are of such a

shape as might fitly be copied in wood or stone or architectural foliages.

I wrote a letter for an Irishman night before last, sending for his wife in Ireland to come to this country. One sentence which he dictated was, "Don't mind the rocking of the vessel, but take care of the children that they be not lost overboard."

Lightning this evening, after a day of successive rains.

March 9. A. M. — Clearing up.

Water is fast taking place of ice on the river and meadows, and morning and evening we begin to have some smooth water prospects. Saw this morning a muskrat sitting "in a round form on the ice," or, rather, motionless like the top of a stake or a mass of muck on the edge of the ice. He then dove for a clam, whose shells he left on the ice beside him.

Boiled a handful of rock-tripe (*Umbilicaria Muhlenbergii*) — which Tuckerman says "was the favorite Rock-Tripe in Franklin's Journey" — for more than an hour. It produced a *black* pulp, looking *somewhat* like boiled tea leaves, and was insipid like rice or starch. The dark water in which it was boiled had a bitter taste and was slightly gelatinous. The pulp was not positively disagreeable to the palate. The account in "The Young Voyageurs" [1] is correct.

P. M. — To Great Meadows.

Peter H. says that he saw gulls (?) and sheldrakes

[1] [By Captain Mayne Reid.]

about a month ago, when the meadow was flooded. I detect the trout minnows not an inch long by their quick motions or quirks, soon concealing themselves. The river channel is open, but there is a very *thin* ice of recent formation over the greater part of the meadows. It is a still, moist, louring day, and the water is smooth. Saw several flocks of large grayish and whitish or speckled ducks, — I suppose the same that P. calls sheldrakes. They, like ducks commonly, incline to fly in a line about an equal distance apart. I hear the common sort of quacking from them. It is pleasant to see them at a distance alight on the water with a slanting flight, launch themselves, and sail along so stately. The pieces of ice, large and small, drifting along, help to conceal them, supply so many objects on the water. There is this last night's ice on the surface, but the old ice still at the bottom of the meadows. In the spaces of still open water I see the reflection of the hills and woods, which for so long I have not seen, and it gives expression to the face of nature. The face of nature is lit up by these reflections in still water in the spring. Sometimes you see only the top of a distant hill reflected far within the meadow, where a dull-gray field of ice intervenes between the water and the shore.

March 10. Misty rain, rain, — the third day of more or less rain.

P. M. — C. Miles road *via* Clamshell Hill.

Misty and mizzling. The radical leaves of the shepherd's-purse are common and fresh, also that early

thistle by Nut Meadow Brook, with much down webbed, holding the mist in drops. Each alder catkin has a clear drop at the end, though the air is filled with mist merely, which from time to time is blown in my face and I put up my umbrella. The bæomyces is very perfect and handsome to-day. It occurs to me that heavy rains and sudden meltings of the snow, such as we had a fortnight ago (February 26th), before the ground is thawed, so that all the water, instead of being soaked up by the ground, flows rapidly into the streams and ponds, is necessary to swell and break them up. If we waited for the direct influence of the sun on the ice and the influence of such water as would reach the river under other circumstances, the spring would be very much delayed. In the violent freshet there is a mechanic force added to the chemic. The willow catkins on the Miles [road] I should say had decidedly started since I was here last, and are all peeping from under their scales conspicuously. At present I should say that the vegetable kingdom showed the influence of the spring as much in the air as in the water, — that is, in the flowing of the sap, the skunk-cabbage buds, and the swelling of the willow catkins. I have detected very little, if anything, starting in brooks or ditches, for the first have far overflowed their banks and [are] full of rapid and sandy water, and the latter are still frequently full of ice. But probably that depends on the year, whether open or not. Saw a skunk in the Corner road, which I followed sixty rods or more. Out now about 4 P. M., — partly because it is a dark, foul day. It is a slender black (and white) animal, with its back re-

markably arched, standing high behind and carrying its head low; runs, even when undisturbed, with a

singular teeter or undulation, like the walking of a Chinese lady. Very slow; I hardly have to run to keep up with it. It has a long tail, which it regularly erects when I come too near and prepares to discharge its liquid. It is white at the end of the tail, and the hind head and a line on the front of the face, — the rest black, except the flesh-colored nose (and I think feet). The back is more arched and the fore and hind feet nearer together than in my sketch. It tried repeatedly to get into the wall, and did not show much cunning. Finally it steered, apparently, for an old skunk or woodchuck hole under a wall four rods off, and got into it, — or under the wall, at least, — for it was stopped up, — and there I view at leisure close to. It has a remarkably long, narrow, pointed head and snout, which enable it to make those deep narrow holes in the earth by which it probes for insects. Its eyes have an innocent, childlike, bluish-black expression. It made a singular loud patting sound repeatedly, on the frozen ground under the wall, undoubtedly with its fore feet (I saw only the upper part of the animal), which reminded me of what I have heard about your stopping and stamping in order to stop the skunk. Probably it has to do with its getting its food, — patting the earth

to get the insects or worms. Though why it did so then I know not.

Its track was small, round, showing the nails, a little less than an inch in diameter, alternate five or six inches by two or two and a half, sometimes two feet together. There is something pathetic in such a sight, — next to seeing one of the human aborigines of the country. I respect the skunk as a human being in a very humble sphere. I have no doubt they have begun to probe already where the ground permits, — or as far as it does. But what have they eat all winter?

The weather is almost April-like. We always have much of this rainy, drizzling, misty weather in early spring, after which we expect to hear geese.

March 11. Fair weather after three rainy days. Air full of birds, — bluebirds, song sparrows, chickadee (phœbe notes), and blackbirds. Song sparrows toward the water, with at least two kinds or variations of their strain hard to imitate. *Ozit, ozit, ozit, psa te te te* (quick) *te te ter twe ter* is one; the other began *chip chip che we*, etc., etc. Bluebirds' warbling curls in elms.

Shall the earth be regarded as a graveyard, a necropolis, merely, and not also as a granary filled with the seeds of life? Is not its fertility increased by this decay? A fertile compost, not exhausted sand.

On Tuesday, the 7th, I heard the first song sparrow chirp, and saw it flit silently from alder to alder. This pleasant morning after three days' rain and mist, they

generally forthburst into sprayey song from the low trees along the river. The developing of their song is gradual but sure, like the expanding of a flower. This is the first *song* I have heard.

P. M. — To Cliffs.

River higher than any time in the winter, I think, yet, there being some ice on the meadows and the tops of reflected trees being seen along its edges, Aunt thought the river had gone down and that this was the ground. Muskrats are driven out of their holes. Heard one's loud plash behind Hubbard's. It comes up, brown striped with wet. I could detect its progress beneath in shallow water by the bubbles which came up. I believe I saw to-day, and have for some time seen, lizards in water, wiggling away more swiftly than tadpoles or frogs. From the hill the river and meadow is about equally water and ice, — rich blue water and islands or continents of white ice — no longer ice in place — blown from this side or that. The distant mountains are all white with snow while our landscape is nearly bare. Another year I must observe the alder and willow sap as early as the middle of February at least. Fair Haven covered with ice. Saw a hawk. Goodwin saw a ground squirrel a fortnight ago and heard robin this morning. He has caught skunks in traps set for minks with a piece of muskrat. Says the fox and skunk eat huckleberries, etc. Nowadays, where snow-banks have partly melted against the banks by the roadside in low ground, I see in the grass numerous galleries where the mice or moles have worked in the winter.

March 12. A. M. — Up railroad to woods.

We have white frosts these mornings. This is the blackbird morning. Their sprayey notes and *con-queree* ring with the song sparrows' jingle all along the river. Thus gradually they acquire confidence to sing. It is a beautiful spring morning. I hear *my* first robin peep distinctly at a distance on some higher trees, — oaks or ? [*sic*], — on a high key. No singing yet. I hear from an apple tree a faint cricket-like chirp, and a sparrow darts away, flying far, *dashing from side to side.* I think it must be the white-in-tail, or grass finch. Saw either a large mouse or a ground squirrel on the snow near the edge of the wood, — probably the former. I hear a jay loudly screaming *phe-phay phe-phay,* — a loud, shrill chickadee's *phebe.* Now I see and hear the lark sitting with head erect, neck outstretched, in the middle of a pasture, and I hear another far off singing. Sing when they first come. All these birds do their warbling especially in the still, sunny hour after sunrise, as rivers twinkle at their sources. Now is the time to be abroad and hear them, as you detect the slightest ripple in smooth water. As with tinkling sounds the sources of streams burst their icy fetters, so the rills of music begin to flow and swell the general quire of spring. Memorable is the warm light of the spring sun on russet fields in the morning.

A new feature is being added to the landscape, and that is expanses and reaches of blue water.

C. says he saw a gull to-day.

P. M. — To Ball's Hill along river.

My companion tempts me to certain licenses of speech, *i. e.* to reckless and sweeping expressions which I am wont to regret that I have used. That is, I find that I have used more harsh, extravagant, and cynical expressions concerning mankind and individuals than I intended. I find it difficult to make to him a sufficiently moderate statement. I think it is because I have not his sympathy in my sober and constant view. He asks for a paradox, an eccentric statement, and too often I give it to him.

Saw some small ducks, black and white, — perhaps teal or widgeons. This great expanse of deep-blue water, deeper than the sky, why does it not blue my soul as of yore? It is hard to soften me now. I see no gulls myself. The time was when this great blue scene would have tinged my spirit more. Now is the season to look for Indian relics, the sandy fields being just bared. I stand on the high lichen covered and colored (greenish) hill beyond Abner Buttrick's; I go further east and look across the meadows to Bedford, and see that peculiar scenery of March, in which I have taken so many rambles, the earth just bare and beginning to be dry, the snow lying on the north sides of hills, the gray deciduous trees and the green pines soughing in the March wind — they look now as if deserted by a companion, the snow. When you walk over bare lichen-clad hills, just beginning to be dry, and look afar over the blue water on the meadows, you are beginning to break up your winter quarters and plan adventures for the new year. The scenery

is like, yet unlike, November; you have the same barren russet, but now, instead of a dry, hard, cold wind, a peculiarly soft, moist air, or else a raw wind. Now is the reign of water. I see many crows on the meadow by the water's edge these days. It is astonishing how soon the ice has gone out of the river, but it still lies on the bottom of the meadow. Is it peculiar to the song sparrow to dodge behind and hide in walls and the like? Toward night the water becomes smooth and beautiful. Men are eager to launch their boats and paddle over the meadows.

The spring birds have come a little earlier this year than last, methinks, and I suspect the spring may be earlier in the air, yet there is more ice and snow and frozen ground still, because the winter has been so much more severe.

I am surprised to find that water froze pretty thick in my chamber the night of the 14th of March, '53, after a fire in the evening, and that they were at work on the ice at Loring's on the 16th. This is very different weather. The ice is all out of the river proper, and all spoiled even on Walden.

March 13. To Boston.

C. says he saw skater insects to-day. Harris tells me that those gray insects within the little log forts under the bark of the dead white pine, which I found about a week ago, are *Rhagium lineatum*. Bought a telescope to-day for eight dollars. Best military spy-glass with six slides, which shuts up to about same size, fifteen dollars, and very powerful. Saw the squares

of achromatic glass from Paris which Clark(e ?)[1] uses; fifty-odd dollars apiece, the larger. It takes two together, one called the flint. These French glasses all one quality of glass. My glass tried by Clark and approved. Only a part of the object (?) glass available. Bring the edge of the diaphragm against middle of the light, and your nail on object glass in line with these shows what is cut off. Sometimes may enlarge the hole in diaphragm. But, if you do so, you may have to enlarge the hole in diaphragm near small end, which must be exactly as large as the pencil of light there. As the diameter of the pencil is to the diameter of the available portion of the object glass, so is the power, — so many times it magnifies. A good glass because the form of the blurred object is the same on each side of the focus, — *i. e.*, shoved in or drawn out. C. was making a glass for Amherst College.

March 14. A. M. — Threatening rain after clear morning.

Great concert of song sparrows in willows and alders along Swamp Bridge Brook by river. Hardly hear a *distinct* strain. Couples chasing each other, and some tree sparrows with them.

R. W. E. saw a small bird in the woods yesterday which reminded him of the parti-colored warbler.

P. M. — To Great Meadows.

Raw thickening mists, as if preceding rain.

Counted over forty robins with my glass in the meadow

[Alvan Clark's name lacks the final "e."]

north of Sleepy Hollow, in the grass and on the snow. A large company of fox-colored sparrows in Heywood's maple swamp close by. I heard their loud, sweet, canary-like whistle thirty or forty rods off, sounding richer than anything yet; some on the bushes singing, *twee twee twa twa ter tweer tweer twa*,—this is the scheme of it only, there being no dental grit to it. They were shy, flitting before me, and I heard a slight susurrus where many were busily scratching amid the leaves of the swamp, without seeing them, and also saw many indistinctly. Wilson never heard but one sing, their common note there being a *cheep*. Saw fresh tracks in what looked like a woodchuck's hole. No ice visible as I look over the meadows from Peter's, though it lies at the bottom.[1] Scared up four black ducks from the flooded meadow on the right of the roadway as you go to Peter's. The water being rough on the meadows, they had apparently sought this smooth and shallow place shut in by the woods.

Alder scales are visibly loosened, their lower edges (*i. e.* as they hang) showing a line of yellowish or greenish. The pads in open warm ditches are now decidedly the greatest growth of this season, though I am not sure how much is due to last fall.

From within the house at 5.30 P. M. I hear the loud honking of geese, throw up the window, and see a large flock in disordered harrow flying more directly north or even northwest than usual. Raw, thick, misty weather.

[1] [Queried in pencil.]

March 15. Pleasant morning, unexpectedly. Hear on the alders by the river the *lill lill lill lill* of the first *F. hyemalis*, mingled with song sparrows and tree sparrows. The sound of Barrett's sawmill in the still morning comes over the water very loud. I hear that peculiar, interesting loud hollow tapping of a woodpecker from over the water.

I am sorry to think that you do not get a man's most effective criticism until you provoke him. Severe truth is expressed with some bitterness.

J. Farmer tells me his dog started up a lark last winter completely buried in the snow.

Painted my boat.

March 16. A. M. — Another fine morning.

Willows and alders along watercourses all alive these mornings and ringing with the trills and jingles and warbles of birds, even as the waters have lately broken loose and tinkle below, — song sparrows, blackbirds, not to mention robins, etc., etc. The song sparrows are very abundant, peopling each bush, willow, or alder for a quarter of a mile, and pursuing each other as if now selecting their mates. It is their song which especially fills the air, made an incessant and undistinguishable trill and jingle by their numbers. I see ducks afar, sailing on the meadow, leaving a long furrow in the water behind them. Watch them at leisure without scaring them, with my glass; observe their free and undisturbed motions. Some dark-brown partly on water, alternately dipping with their tails up, partly on land. These I think may be sum-

mer ducks.[1] Others with bright white breasts, etc., and black heads about same size or larger, which may be golden-eyes, *i. e.* brass-eyed whistlers.[2] They dive and are gone some time, and come up a rod off. At first I saw but one, then, a minute after, three. The first phœbe near the water is heard.

Saw and heard honey-bees about my boat in the yard, attracted probably by the beeswax in the grafting-wax which was put on it a year ago. It is warm weather. A thunder-storm in the evening.

March 17. *Friday.* A remarkably warm day for the season; too warm while surveying without my great-coat; almost like May heats.

4 P. M. — To Cliffs.

The grass is *slightly* greened on south bank-sides, — on the south side of the house. It begins to be windy. Saw a small gyrinus at the brook bridge behind Hubbard's Grove. The first tinge of green appears to be due to moisture more than to direct heat. It is not on bare dry banks, but in hollows where the snow melts last that it is most conspicuous. Fair Haven is open for half a dozen rods about the shores. If this weather holds, it will be entirely open in a day or two.

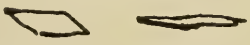
March 18. *Saturday.* Very high wind this forenoon; began by filling the air with a cloud of dust. Never felt it shake the house so much; filled the house with dust through the cracks; books, stove, papers covered

[1] Were they not females of the others?

[2] Probably both sheldrakes. *Vide* April 6 and 7, 1855.

with it. Blew down Mr. Frost's chimney again. Took up my boat, a very heavy one, which was lying on its bottom in the yard, and carried it two rods. The white caps of the waves on the flooded meadow, seen from the window, are a rare and exciting spectacle, — such an angry face as our Concord meadows rarely exhibit. Walked down the street to post-office. Few inhabitants out more than in a rain. Elms bending and twisting and thrashing the air as if they would come down every moment. I was cautious about passing under them. Yet scarcely a rotten limb in the street. The highest winds occur neither in summer, when the trees are covered with leaves, nor in winter, when they may be covered with ice. Saw a flattened toad on the sidewalk. Could it have been last year's ?[1]

P. M. — Walked round by the west side of the river to Conantum.

Wind less violent. C. has already seen a yellow-spotted tortoise in a ditch. (Two sizable elms by river in Merrick's pasture blown down, roots being rotted off on water side.) The willow catkins this side M. Miles's five eighths of an inch long and show some red. Poplar catkins nearly as large, color somewhat like a gray rabbit. Old barn blown down on Conantum. It fell regularly, like a weak box pushed over, without moving its bottom,  the roof falling upon it a little to leeward. The hay is left exposed, but does not blow away. The river was at its height last night. Before this we saw many robins and sparrows under Clamshell

[1] Guess not.

Hill for shelter. Birds seek warm and sheltered places in such weather. It is very cold and freezing, this wind. The water has been blown quite across the Hubbard's Bridge causeway in some places and incrusted the road with ice. Before looking this way we had seen the whitened shore from Lupine Hill. It is blown and

dashes against the willows and incrusts them with ice, sometimes to the height of three feet, with icicles shaped like bulls' horns, especially observable where many osiers stand together, and from the more horizontal osiers, etc., depend icicles, five or six inches long, very regularly, looking exactly like coarse rakes, apparently not the result of melting but of the spray and water blown or dashed upon them: only more regular. A

very wintry sight.

The water is in many places blown a rod on to the shore and frozen. Saw where a woodchuck (probably) had dug out quite a pile of gravel in the side of a hill.

March 19. *Sunday.* Cold and windy. The meadow ice bears where shallow. William Rice 2d (?) saw a woodchuck last Sunday. Met his father in Walden Woods, who described a flock of crows he had just seen which followed him "eying down, eying down."

Saw in Mill Brook behind Shannon's three or four shiners [1] (the first), poised over the sand with a distinct longitudinal light-colored line midway along their

[1] Minnows?

sides and a darker line below it. This is a noteworthy and characteristic lineament, or cipher, or hieroglyphic, or type, of spring. You look into some clear, sandy-bottomed brook, where it spreads into a deeper bay, yet flowing cold from ice and snow not far off, and see, indistinctly poised over the sand on invisible fins, the outlines of a shiner, scarcely to be distinguished from the sands behind it, as if it were transparent, or as [if] the material of which it was builded had all been picked up from them. Chiefly distinguished by the lines I have mentioned.

Goodwin killed a pigeon yesterday.

Flint's Pond almost entirely open, — much more than Fair Haven.

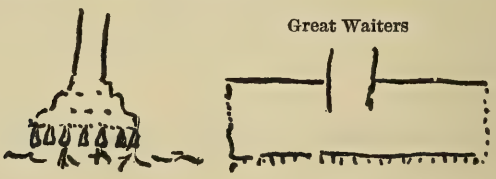
March 21. *Tuesday.* At sunrise to Clamshell Hill.

River skimmed over at Willow Bay last night. Thought I should find ducks cornered up by the ice; they get behind this hill for shelter. Saw what looked like clods of plowed meadow rising above the ice. Looked with glass and found it to be more than thirty black ducks asleep with their heads in [*sic*] their backs, motionless, and thin ice formed about them. Soon one or two were moving about slowly. There was an open space, eight or ten rods by one or two. At first all within a space of apparently less than a rod [in] diameter. It was 6.30 A. M., and the sun shining on them, but bitter cold. How tough they are! I crawled far on my stomach and got a near view of them, thirty rods off. At length they detected me and quacked. Some got out upon the ice, and when I rose up all took to

flight in a great straggling flock which at a distance looked like crows, in no order. Yet, when you see two or three, the parallelism produced by their necks and bodies steering the same way gives the idea of order.

March 22. Wednesday. P. M. — Launch boat and paddle to Fair Haven.

Still very cold. The most splendid show of ice chandeliers, casters, hour-glasses ($\frac{1}{2}$) that I ever saw or imagined about the piers of the bridges, surpassing any crystal, so large. Rather like the bases of columns,



— terraced pedestals, that is it, — the prototypes of the ornaments of the copings and capitals. Perfect and regular, sharp, cone-shaped drops hang from the first figure a few inches above the water. I should have described it then. It would have filled many pages. Scared up my flock of black ducks and counted forty together. See crows along the water's edge. What do they eat? Saw a small black duck with glass, — a dipper (?). Fair Haven still covered and frozen anew in part. Shores of meadow strewn with cranberries. The now silvery willow catkins (notwithstanding the severe cold) shine along the shore, over the cold water, and C. thinks some willow osiers decidedly more yellow.

March 23. *Thursday.* Snows and rains a little. The birds in yard active now, — hyemalis, tree sparrow, and song sparrow. The hyemalis jingle easily distinguished. Hear all together on apple trees these days. Minott confesses to me to-day that he has not been to Boston since the last war, or 1815. Aunt said that he had not been ten miles from home since; that he has not been to Acton since Miss Powers [?] lived there; but he declared that he had been there to cornwallis and musters. When I asked if he would like to go to Boston, he answered he was going to another Boston.

March 24. Fair again, the snow melting. Great flocks of hyemalis drifting about with their jingling note. The same ducks under Clamshell Hill. The elm buds were apparently expanded before this cold, which began on the 18th. Goose Pond half open. Flint's has perhaps fifteen or twenty acres of ice yet about shores. Can hardly tell when it is open this year. The black ducks — the most common that I see — are the only ones whose note I know or hear, — a hoarse, croaking quack. How shy they are!

March 25. *Saturday.* Cold and windy.

Down river in boat to Great Meadows.

Freezes on oars. Too cold and windy almost for ducks. They are in the smoother open water (free from ice) under the lee of hills. Got a boat-load of driftwood, — rails, bridge timber, planks, etc. White maple buds bursting, making trees look like some fruit trees with blossom-buds.

Is not the small duck or two I see one at a time and flying pretty high a teal? Willow osiers near Mill Brook mouth I am almost certain have acquired a fresher color; at least they surprise me at a distance by their green passing through yellowish to red at top.

March 26. River froze over at Lily Bay.[1]

March 27. Saw a hawk — probably marsh hawk — by meadow.

March 28. P. M. — To White Pond.

Coldest day for a month or more, — severe as almost any in the winter. Saw this afternoon either a snipe or a woodcock; it appeared rather small for the last.[2] Pond opening on the northeast. A flock of hyemalis drifting from a wood over a field incessantly for four or five minutes, — thousands of them, notwithstanding the cold. The fox-colored sparrow sings sweetly also. Saw a small slate-colored hawk, with wings transversely mottled beneath, — probably the sharp-shinned hawk.

Got first proof of "Walden."

March 29. *Wednesday.* P. M. — To Fair Haven.

Coldest night. Pump froze so as to require thawing. Saw two marsh hawks (?), white on rump. A gull of

[1] ["Lily" is crossed out in pencil and "Willow?" substituted (the interrogation-point being Thoreau's).]

[2] Probably a snipe.

pure white, — a wave of foam in the air. How simple and wave-like its outline, the outline of the wings presenting two curves, between which the tail is merely the point of junction, — all wing like a birch scale; tail remarkably absorbed.

Saw two white-throated, black-beaked divers fly off swiftly low over the water, with black tips of wings curved short downward. Afterward saw one scoot along out from the shore upon the water and dive; and that was the last I could see of him, though I watched four or five minutes. Fair Haven half open; channel wholly open. See thin cakes of ice at a distance now and then blown up on their edges and glistening in the sun. Had the experience of arctic voyagers amid the floe ice on a small scale. Think I saw a hen-hawk, — two circling over Cliffs.

March 30. 6 A. M. — To Island.

First still hour since the afternoon of the 17th. March truly came in like a lamb and went out like a lion this year. Remarkably and continuously pleasant weather from the very first day till the 18th. Apparently an early spring, — buds and birds well advanced, — then suddenly very severe cold and high winds, cold enough to skim the river over in broad places at night, and commencing with the greatest and most destructive gale for many a year, felt far and wide; and it has never ceased to blow since till this morning. Vegetation is accordingly put back. The ground these last cold (thirteen) days has been about bare of snow, but frozen. Some had peas and potatoes in before it.

First half of month very pleasant and mild spring weather, last half severe winter cold and high winds. The water at its highest, — not very high, — this month on the 17th. Ducks have been lurking in sheltered places not frozen. Robins feed along the edge of the river. At the Island I see and hear this morning the cackle of a pigeon woodpecker at the hollow poplar; had heard him tapping distinctly from my boat's place, $\frac{1}{4}+$ of a mile. Great flocks of tree sparrows and some *F. hyemalis* on the ground and trees on the Island Neck, making the air and bushes ring with their jingling. The former — some of them — say somewhat like this: *a che che, ter twee twee, tweer tweer twa.* It sounded like a new bird. The black ducks seem always to rise with that loud, hoarse croaking — quacking. The river early is partly filled with thin, floating, hardly cemented ice, occasionally turned on its edge by the wind and sparkling in the sun. If the sun had kept out of the way one day in the past fortnight, I think the river would have frozen to bear.

Read an interesting article on Étienne Geoffroy Saint-Hilaire, the friend and contemporary of Cuvier, though opposed to him in his philosophy. He believed species to be variable. In looking for anatomical resemblances he found that he could not safely be guided by function, form, structure, size, color, etc., but only by the relative position and mutual dependence of organs. Hence his *Le Principe des Connexions* and his maxim, "An organ is sooner destroyed than transposed," — "Un organ est plutôt altéré, atrophié, anéanti, que transposé." A principal formula

of his was, "Unity of Plan, Unity of Composition." (In the *Westminster Review*, January, 1854.)

March 31. Weather changes at last to drizzling.

In criticising your writing, trust your fine instinct. There are many things which we come very near questioning, but do not question. When I have sent off my manuscripts to the printer, certain objectionable sentences or expressions are sure to obtrude themselves on my attention with force, though I had not consciously suspected them before. My critical instinct then at once breaks the ice and comes to the surface.

V

APRIL, 1854

(ÆT. 36)

April 1. The tree sparrows, hyemalis, and song sparrows are particularly lively and musical in the yard this rainy and truly April day. The air rings with them. The robin now *begins* to sing sweet powerfully.

P. M. — Up Assabet to Dodge's Brook; thence to Farmer's.

April has begun like itself. It is warm and showery, while I sail away with a light southwest wind toward the Rock. Sometimes the sun seems just ready to burst out, yet I know it will not. The meadow is becoming bare. It resounds with the sprayey notes of blackbirds. The birds sing this warm, showery day after a fortnight's cold (yesterday was wet too), with a universal burst and flood of melody. Great flocks of hyemalis, etc., pass overhead like schools of fishes in the water, many abreast. The white maple stamens are beginning to peep out from the wet and weather-beaten buds. The earliest alders are just ready to bloom — to show their yellow — on the first decidedly warm and sunny day. The water is smooth at last and dark. Ice no longer forms on the oars. It is pleasant to paddle under the dripping hemlocks this dark day. They

make more of a wilderness impression than pines. The lines of sawdust from Barrett's mill at different heights on the steep, wet bank under the hemlocks rather enhance the impression of freshness and wildness, as if it were a new country. Saw a painted tortoise on the bottom. The bark of poplar boughs which have been held in the ice along the sides of the river the past winter is gnawed, probably by muskrats. Saw floating a good-sized rooster without a head, — the red stump sticking out, — probably killed by an owl. Heard a bird whose note was very much like that of the purple finch, — loud and clear. First *smelled* the muskrat. Yesterday and to-day I hear the cackle of the flicker, so agreeable from association. It brings the year about. From afar, on some blasted tree, it makes all the vale ring with [?] its swelling flicker (?). Saw, at Farmer's, his snow-grubs, — the same I had seen (*vide* back). Harris, in this week's *New England Farmer*, thinks, on comparing them with English plates, that they are the larvæ of one of the species of crane-fly (*Tipula*). I saw some still in F.'s pasture. Did they not come out from the roots of the grass prematurely in the winter, and so become food for birds? The ground in Farmer's garden was in some places whitened with the droppings of the snowbirds after seeds of weeds, — *F. hyemalis* and others. The hyemalis is in the largest flocks of any at this season. You see them come drifting over a rising ground just like snowflakes before a northeast wind.

I was surprised to see how Farmer's young pears,

three or four feet high, on quince stocks, had been broken down by the snow-drifts, — broken over and over, apparently the snow freezing over them and then at last by its weight breaking them down.

I hear the jingle of the hyemalis from within the house, sounding like a trill.

April 2. P. M. — To Conantum *via* Nut Meadow Brook.

Saw black ducks in water and on land. Can see their light throats a great way with my glass. They do not dive, but dip. That liverwort [1] in the J. Hosmer ditch is now obvious. It has little green cups on its frond, with a fringed mouth; but I saw something similar but shorter and more orbicular yesterday, under the hemlock bank, with little black dots on it. The radical leaves of some plants appear to have started, look brighter. The shepherd's-purse (?), and plainly the skunk-cabbage. In the brook there is the least possible springing yet. A little yellow lily in the ditch and sweet flag *starting* in the brook. I was sitting on the rail over the brook, when I heard something which reminded me of the song of the robin in rainy days in past springs. Why is it that not the note itself, but something which reminds me of it, should affect me most? — the ideal instead of the actual.

At Lee's Cliff the red-stemmed moss. The slippery elm is about as forward as the common, with its rusty

[1] Marchantia?

buds. The saxifrage is the most springlike plant, methinks, yet.

The tree sparrows make the alders, etc., ring. They have a metallic chirp and a short canary-like warble. They keep company with the hyemalis.

April 3. Saw from window with glass seven ducks on meadow-water, — only one or two conspicuously white, — these, black heads, white throats and breasts and along sides, — the rest of the ducks, brownish, probably young males and females. Probably the golden-eye. Jardine says it is rare to see more than one full-plumaged male in a flock.

P. M. — To Cliffs by boat.

Did I see crow blackbirds with the red-wings and hear their harsher chattering?

The water has gone down so much that I have to steer carefully to avoid the thick hummocks left here and there on the meadow by the ice. I see the deep holes they were taken out of. A muskrat has just built a small cabin, — apparently a bushel of mouthfuls on one. No clams up yet. I see a very little snow ice still, at a distance on the north sides of hills and walls. The wind is southeasterly. This is methinks the first hazy day, though not so warm as the 17th of March. The aspect of the woods reminds me of landscapes, and the sough of the wind in the pines sounds warmer, whispering of summer. I think I may say that Flint's broke up entirely on the first wet day after the cold spell, — *i. e.* the 31st of March, — though I have not been there lately. Fair Haven will last some days yet.

April 4. All day surveying a wood-lot in Acton for Abel Hosmer. He says that he has seen the small slate-colored hawk pursue and catch doves, *i. e.* the sharp-shinned. Has found some trouble in driving off a large slate-colored hawk from a hen in his yard, at which he pounced again close by him, — undoubtedly a goshawk. Has also noticed the butcher-bird catching other birds. Calls him the "mock-bird." I observe that all the farmers have pretty much the same stories of this kind to tell. They will describe a large, bold slate-colored hawk (the goshawk) about here some two years ago, which caught some of their hens, and the like. The afternoon very pleasant.

April 5. This morning heard a familiar twittering over the house; looked up and saw white-bellied swallows. Another saw them yesterday.

Surveying all day for Mr. Hoar in Carlisle, near Hitchinson's and near I. [?] Green's.

See many hawks about yesterday and to-day, — marsh hawks and perhaps hen-hawks, these being pleasant days. It proved very pleasant and warm, and, while surveying in the woods with my greatcoat off, I heard a few stertorous sounds from the croaking frog. Also, as we rode along to Green's, we saw many of the large butterfly, dark with buff-edged wings, and also small reddish ones, in the dry sprout-lands. The same warm and pleasant weather brings them out to flutter along the roadside in sprout-lands, that does the hawks to sail along the meadow-side and over the wood. Saw the first frog by the roadside, — I believe a speckled,

i. e. palustris, — and, at the Green lot, heard the hyla. These days, when a soft west or southwest wind blows and it is truly warm, and an outside coat is oppressive, — these bring out the butterflies and the frogs, and the marsh hawks which prey on the last. Just so simple is every year. Whatever year it may be, I am surveying, perhaps, in the woods; I have taken off my outside coat, perhaps for the first time, and hung it on a tree; the zephyr is positively agreeable on my cheek; I am thinking what an elysian day it is, and how I seem always to be keeping the flocks of Admetus such days — that is my luck; when I hear a single, short, well-known stertorous croak from some pool half filled with dry leaves. You may see anything now — the buff-edged butterfly and many hawks — along the meadow; and hark! while I was writing down that field note, the shrill peep of the hylodes was borne to me from afar through the woods.

I rode with my employer a dozen miles to-day, keeping a profound silence almost all the way as the most simple and natural course. I treated him simply as if he had bronchitis and could not speak, just as I would a sick man, a crazy man, or an idiot. The disease was only an unconquerable stiffness in a well-meaning and sensible man.

Begin to look off hills, and see the landscape again through a slight haze, with warm wind on the cheek.

April 6. P. M. — Up Assabet.

A still warmer day than yesterday — a warm, moist rain-smelling west wind. I am surprised [to] find so

much of the white maples already out. The light-colored stamens show to some rods. Probably they *began* as early as day before yesterday. They resound with the hum of honey-bees, heard a dozen rods off, and you see thousands of them about the flowers against the sky. They know where to look for the white maple and when. This susurrus carries me forward some months toward summer. I was reminded *before* of those still warm summer noons when the breams' nests are left dry, and the fishes retreat from the shallows into the cooler depths, and the cows stand up to their bellies in the river. The reminiscence came over me like a summer's dream. The alders, both kinds, just above the hemlocks, have just begun to shed their pollen. They are hardly as forward as the white maples, but these are not in so warm a position as some. I am in doubt which (alder or maple) may be earliest this year. Have not looked so closely as last year. In clearing out the Assabet Spring, disturbed two small speckled (*palustris*) frogs just beginning to move. Saw flying over what I at first thought a gull, then a fish hawk. Heard the snipe over the meadows this evening; probably to be heard for a night or two; sounds on different days as if approaching or receding; — over the meadows recently become bare.

April 7. 6 A. M. — Down railroad to Cliffs.

The *Populus tremuloides* in a day or two. The hazel stigmas are well out and the catkins loose, but no pollen shed yet. On the Cliff I find, after long and careful search, one sedge above the rocks, low amid the with-

ered blades of last year, out, its little yellow beard amid the dry blades and few green ones, — the first *herbaceous* flowering I have detected. Fair Haven is completely open. It must have been so first either on the 5th or 6th.

April 8. *Saturday.* 6 A. M. — To Clamshell Hill.

Am surprised to find the skunk-cabbage out, shedding pollen (a few). This was probably the case in some places on the 5th and 6th. There has been very little growth visible in its spathes for a month. Its spring seems to be in the fall partly. This spring it has suffered more than usual, owing to the severe cold of the last half of March. Did I see a grass finch? Cheney's elm begins to show stamens. That remarkably warm first half of March appears to have advanced the plants very much, and as soon as the cold last half was past they burst out almost together. Spearers' lights two or three nights past.

P. M. — To Lee's Cliff *via* Clamshell.

Methinks I do not see such great and lively flocks of hyemalis and tree sparrows in the morning since the warm days, the 4th, 5th, and 6th. Perchance after the warmer days, which bring out the frogs and butterflies, the alders and maples, the greater part of them leave for the north and give place to newcomers.

At the Lyceum the other night I felt that the lecturer had chosen a theme too foreign to himself and so failed to interest me as much as formerly. He described things not in or near to his heart, but toward his ex-

tremities and superficies. The poet deals with his privatest experience. There was no *central* nor centralizing thought in the lecture.

Some southward banks and hillsides are now considerably tinged with green, not observed at a distance. I see the celandine and catnep (?) beginning to look green along the graveyard fence. The stigmas of the hazels (beyond Clamshell) are a splendid crimson star when brought between me and the light. I cannot find any of their catkins shedding pollen yet, but they may to-morrow. On the 5th saw a man sowing rye. Heard a prolonged dream from frog (?) in the river meadow; or was it a toad ? [1] See black ducks and hear their hoarse quacking. They commonly rise sixty rods off. They feed as often on the land as in the water, and look as clumsy there as the tame do. At Nut Meadow Brook saw, or rather heard, a muskrat plunge into the brook before me, and saw him endeavoring in vain to bury himself in the sandy bottom, looking like an amphibious animal. I stooped and, taking him by his tail, which projected, tossed him ashore. He did not lose the points of compass, but turned directly to the brook again, though it was toward me, and, plunging in, buried himself in the mud, and that was the last I saw of him. I see many yellow-spot tortoises to-day, — some of them quite rusty-looking. The alders are pretty generally [*sic*]; they are either yellowish, greenish, or reddish. At Heart-leaf Pond the croaking frogs are in full blast. I saw many on the surface, — small, ferruginous or dark brown, bodies two inches long, spread

[1] [Doubtless a toad. See *postea*.]

out on the surface and from time to time swimming about and toward each other, or diving. Most utter a short croak several times. Others use a peculiar squirming and nasal variation hard to imitate, somewhat like *er-wăh* (not broad *war* or *wor*) *er-wăh er-wăh er-wăh*, faster and faster, the nasal between the two syllables, something like *what what what what* spoken nasally. Then all will be silent. They have spells at it. Did I see their spawn? A turtle dove — went off with a slight whistling note. The willow near Miles's to-morrow or next day, *if fair*. That at the bridge equally early. The poplar catkins (*P. tremuloides*) on Conantum are beginning to curve downward, with their red anthers not yet open within the down, — mulberry-like. Apparently will open to-morrow, if warm; say the 10th. The polypody and marginal (?) shield fern and the spleenwort are evergreens at Lee's Cliff. The slippery elm, apparently in two or three days. Am surprised to find two crowfoot blossoms withered. They undoubtedly opened the 5th or 6th; say the last. They must be earlier here than at the Cliffs, where I have observed them the last two years. They are a little earlier than the saxifrage around them here, of which last I find one specimen at last, in a favorable angle of the rock, just opening. I have not allowed enough for the difference of localities. The columbine shows the most spring growth of any plant. What is that plant with narrow toothed leaves which has already shot up so straight four or five inches on the shelves of the rock? *Arabis lævigata?*

Saw a large bird sail along over the edge of Wheeler's

cranberry meadow just below Fair Haven, which I at first thought a gull, but with my glass found it was a hawk and had a perfectly white head and tail and broad or blackish wings. It sailed and circled along over the low cliff, and the crows dived at it in the field of my glass, and I saw it well, both above and beneath, as it turned, and then it passed off to hover over the Cliffs at a greater height. It was undoubtedly a white-headed eagle. It was to the eye but a large hawk.

Saw several yellow redpolls (*Sylvia petechia*) on the willows by the Hubbard Bridge. Am not sure I heard their note. May have mistaken it formerly for the pine warbler. Its chestnut crown would distinguish it.

Hazel, the very first male, open.

I find that I can criticise my composition best when I stand at a little distance from it, — when I do not see it, for instance. I make a little chapter of contents which enables me to recall it page by page to my mind, and judge it more impartially when my manuscript is out of the way. The distraction of surveying enables me rapidly to take new points of view. A day or two surveying is equal to a journey.

Pickerel have darted in shallows for nearly a week.

Some poets mature early and die young. Their fruits have a delicious flavor like strawberries, but do not keep till fall or winter. Others are slower in coming to their growth. Their fruits may be less delicious, but are a more lasting food and are so hardened by the sun of summer and the coolness of autumn that they keep sound over winter. The first are June-eatings, early

but soon withering; the last are russets, which last till June again.

April 9. I have not noticed any fox-colored sparrows for a week.[1] A large-catkined sallow (?) by the railroad, ten rods this side the jog on the west, *just* bursting out, with its pinkish-orange (before bursting) anthers. There is a little ice snow [*sic*] still under the north side of hills. Saw several more redpolls with their rich, glowing yellow breasts by the causeway sides. Saw a wren on the edge of Nathan Stow's wood and field, with some of the habits of a creeper, lurking along a fallen pine and birch, in and out in a restless manner with tail up, a snuff-colored bird with many white spots and a fine chirping note. Can it be the winter or the wood wren? Callitriche just started from bottom; pollywogs two inches long. Chrysosplenium out, — a few, — perhaps a day or two, where they rest just on the surface of the water. Cowslip in Hubbard's Close will open the first warm and sunny hour. Perhaps already at Second Division.[2] The skunk-cabbage leaves are unfolding at Brister's Hill edge, and a grass-like, groove-leaved plant three or four inches high. Nosing of skunks nowadays, and since frost out in spots. The beaked hazel stigmas out; put it just after the common. *Lycopodium lucidulum* is as green as ever.

I am surprised to find Walden completely open. When did it open? According to all accounts, it must have been between the 6th and 9th. Fair Haven must

[1] *Vide* 16th. [2] *Vide* 16th.

have opened entirely the 5th or 6th, and Walden very nearly at the same time. This proves how steadily it has been melting, notwithstanding the severe cold of the last half of March; *i. e.*, it is less affected by transient heat or cold than most ponds.

The flowers have blossomed very suddenly this year as soon as the long cold spell was over, and almost all together. As yet the landscape generally wears its November russet.

April 10. April rain. How sure a rain is to bring the tree sparrows into the yard, to sing sweetly, canary-like!

I bought me a spy-glass some weeks since. I buy but few things, and those not till long after I begin to want them, so that when I do get them I am prepared to make a perfect use of them and extract their whole sweet.

Saw a dead sucker yesterday.

P. M. — To Great Meadows by boat, and sail back.

There are many snipes now feeding in the meadows, which you come close upon, and then they go off with hoarse *cr-r-r-ack cr-r-r-ack*. They dive down suddenly from a considerable height sometimes when they alight. A boy fired at a blue-winged teal a week ago. A great many red-wings along the water's edge in the meadow. Some of these blackbirds quite black, and some *apparently larger* than the rest. Are they all red-wings? The crimson stigmas, like the hazel, of the white maple, generally by themselves, make handsome show.

April 11. A. M. — Heard the clear, rather loud and rich warble of a purple finch and saw him on an elm. Wilson says they feed on the coverings of the blossoms. It is a distinct and peculiar note, not to be confounded with anything before it. I suspect that I heard one on the 1st of April, *q. v.*

P. M. — Surveying in Lincoln.

Large ant-hills in the woods, but no ants.

Evening on river.

Fine full moon; river smooth. Hear a slight snoring of frogs on the bared meadows. Is it not the *R. palustris?* This the first moon to walk by.

April 12. *Wednesday.* Surveying for Parks in Lincoln.

A white frost this morning, after the clear moonlight.

Parks says he saw a buff-edged butterfly a month ago, *i. e.* before the 17th of March. The hazels are well out to-day, and their pollen yellows my clothes, it being a warm (off-coat) day. When I went to Mr. P.'s house at noon, he addressed me, "Now, what will you have to drink?" and soon appeared stirring a glass of gin for himself.

Waited at Lincoln depot an hour and a half. Heard the telegraph harp. I perceived distinctly that man melts at the sound of music, just like a rock exposed to a furnace heat. They need not have fabled that Orpheus moved the rocks and trees, for there is nothing more insensible than man; he sets the fashion to the rocks, and it is as surprising to see him melted, as when children see the lead begin to flow in a crucible.

I observe that it is when I have been intently, and it may be laboriously, at work, and am somewhat listless or abandoned after it, reposing, that the muse visits me, and I see or hear beauty. It is from out the shadow of my toil that I look into the light. The music of the spheres is but another name for the Vulcanic force. May not such a record as this be kept on one page of the Book of Life: "A man was melted to-day."

April 13. A clear and pleasant morning. Walked down as far as Moore's at 8 A. M. and returned along the hill. Heard the first chip-bird, sitting on an apple [tree], with its head up and bill open, jingling *tche-tche-tche-tche-tche*, etc., very fast. Hear them in various parts of the town. On the hill near Moore's hear the *F. juncorum*, — *phē-phē-phē-phē-phē, pher-phē-ē-ē-ē-ē-ē-ē-ē-ē*. How sweet it sounds in a clear warm morning in a wood-side pasture amid the old corn-hills, or in sprout-lands, a [*sic*] clear and distinct, "like a spoon in a cup," the last part very fast and ringing. Hear the pine warbler also, and *think I see* a female red-wing flying with some males. Did I see a bay-wing? Heard a purple finch on an elm, like a faint robin.

P. M. — Sail to Bittern Cliff.

The surface of the water, toward the sun, reflecting the light with different degrees of brilliancy, is very exhilarating to look at. The red maple in a day or two. I begin to see the anthers in some buds. So much more of the scales of the buds is now uncovered that the tops of the swamps at a distance are reddened. A couple of large ducks, which, because they flew low

over the water and appeared *black* with a little white, I thought not black ducks, — possibly velvet or a merganser. The black ducks rise at once to a considerable height and often circle about to reconnoitre. The golden-brown tassels of the alder are very rich now. The poplar (*tremuloides*) by Miles's Swamp has been out — *the earliest catkins* — maybe two or three days. On the evening of the 5th the body of a man was found in the river between Fair Haven Pond and Lee's, much wasted. How these events disturb our associations and tarnish the landscape! It is a serious injury done to a stream. One or two crowfoots on Lee's Cliff, fully out, surprise me like a flame bursting from the russet ground. The saxifrage is pretty common, ahead of the crowfoot now, and its peduncles have shot up. The slippery elm is behind the common, which is fully out beside it. It will open apparently in about two days of pleasant weather.[1] I can see the anthers plainly in its great rusty, fusty globular buds. A small brown hawk with white on rump — I think too small for a marsh hawk — sailed low over the meadow.[2] Heard now, at 5.30 P.M., that faint bullfrog-like note from the meadows, — *er-er-er.* Many of the button-bushes have been broken off about eighteen inches above the present level of the water (which is rather low), apparently by the ice. Saw a piece of meadow, twelve feet in diameter, which had been dropped on the northwest side of Willow Bay on a bare shore, thickly set with button-bushes five feet high, per-

[1] 15th, sheds pollen in chamber. Say 18th. *Vide* 23d.

[2] May it have been a young male harrier?

fectly erect, which will no doubt flourish there this summer. Thus the transplanting of fluviatile plants is carried on on a very large and effective scale. Even in one year a considerable plantation will thus be made on what had been a bare shore, and its character changed. The meadow cannot be kept smooth.

The winter-rye fields quite green, contrasting with the russet.

Saw an old log, stripped of bark, either poplar or maple, four feet long, — its whole upper half covered with that handsome winkle-like fungus.[1] They are steel-colored and of a velvety appearance, somewhat semicircular, with concentric growths (?) of different shades, passing from quite black within through a slaty-blue to (at present) a buff edge.[2] Beneath cream-color. There are many minute ones a tenth of an inch in diameter, the shell-like leaf or ear springing from one side. The full-grown are sometimes united into one leaf for eight or nine inches in one level along the log, tier above tier, with a scalloped edge. They are handsomest when two or more are opposed, meeting at their bases, and make a concentric circle. They remind you of shells, also of butterflies. The great variety and regularity of the shading are very interesting. They spring from a slight base, rising by a narrow neck. They grow on stumps and other dead wood on land, even driftwood left high, just as some marine shells, their relatives, grow on driftwood. They

[1] *Auricularia.*

[2] Saw some the 16th wholly faded out to this color on an oak stump.

are a sort of dimple. Does not the whole at last fade out to the buff of the edge?

April 14. *Friday.* 6 A. M. — To Nawshawtuct.

There is a general tinge of green now discernible through the russet on the bared meadows and the hills, the green blades just peeping forth amid the withered ones. Can they be red-wings which I have seen for some time with the red-wings, — without red or buff? They have a split note, perhaps no *gurgle-ee!* There are spider-webs on the meadow lately bared. It is difficult to find the snipe, though you stand near where he alights. Saw yellow redpolls, on Cheney's elm, — a clear metallic chip and jerks of the tail.

April 15. Morning. — Snow and snowing; four inches deep. Yesterday was very cold. Now, I trust, it will come down and out of the air. Many birds must be hard put to it. Some tree sparrows and song sparrows have got close up to the sill of the house on the south side, where there is a line of grass visible, for shelter. When Father came down this morning he found a sparrow squatting in a chair in the kitchen. Does n't know how it came there. I examined it a long time, but could not make it out. It was five or six inches long, with a somewhat finch-like bill (bluish-black above and light below); general aspect above pale brown, mottled with buffish and whitish; bay and a *little* black on the wings; the crown a faint bay, divided by an ashy line, with a broad ashy line over eye and a distincter bay or chestnut line from the angle of the

mouth backward; legs *pale clear flesh-color, feet black,* claws slender; two *faint* whitish bars on wings (the tips of feathers); the breast ashy-white, with many dark or black spots edged with bay in chains; *no yellow* about it; a rounded tail, long and of a pretty uniform pale brown or bay, ashy on the inner vanes, but *no white nor black* in it; a rather slender bird. It made me *think* of the bay-wing and of the Savannah sparrow.

P. M. — This cold, moist, snowy day it is easier to see the birds and get near them. They are driven to the first bare ground that shows itself in the road, and the weather, etc., makes them more indifferent to your approach. The tree sparrows look much stouter and more chubby than usual, their feathers being puffed up and darker also, perhaps with wet. Also the robins and bluebirds are puffed up. I see the white under sides of many purple finches, busily and silently feeding on the elm blossoms within a few feet of me, and now and then their bloody heads and breasts. They utter a faint, clear chip. Their feathers are much ruffled. The yellow redpoll hops along the limbs within four or five feet of me.

Martins the 13th first. The arrival of the purple finches appears to be coincident with the blossoming of the elm, on whose blossom it feeds.

Johnson in his "Wonder-working Providence" speaks of "an army of caterpillars" in New England in 1649, so great "that the cart wheels in their passage were painted green with running over the great swarms of them."

April 16. A cold, disagreeable day, — sun not fairly out, — yet the snow of yesterday melts apace; you can almost see it melt. Each time I look out I see more of russet or green. At first the bare ground showed itself in the middle of the road and rapidly widened, giving the birds wider pasture; then the grass in the fields began to peep through and the landscape to acquire a russet hue again. The green blades under the south side of the houses and hills appear to have grown wonderfully since the snow fell, and to be several shades darker green.

P. M. — To epigæa.

Saw a fox-colored sparrow still and black ducks. There are four or five cowslips open at the Second Division Meadow, — first probably about the 11th. The buds of the shad-bush are much expanded and show considerable green or yellowish, — more than [any other] native shrub or tree that I think of.[1] The mayflower under the snow will not open for some days at least, — maybe a week. The winkle fungi are arranged either on the upper half of a prostrate log or one above another around a dead stump. Saw some to-day almost completely faded to a dark cream-color (or the buff of the edge of mine), though alternating with some faint steel-colored lines.

When I meet one of my neighbors these days who is ridiculously stately, being offended, I say in my mind: "Farewell! I will wait till you get your manners off. Why make politeness of so much consequence, when you are ready to assassinate with a word? I do not like

[1] Must be blossom-buds.

any better to be assassinated with a rapier than to be knocked down with a bludgeon. You are so grand that I cannot get within ten feet of you." Why will men so try to impose on one another? Why not be simple, and pass for what they are worth only? O such thin skins, such crockery, as I have to deal with! Do they not know that I can laugh? Some who have so much dignity that they cannot be contradicted! Perhaps somebody will introduce me one day, and then we may have some intercourse. I meet with several who cannot afford to be simple and true men, but personate, so to speak, their own ideal of themselves, trying to make the manners supply the place of the man. They are puffballs filled with dust and ashes.

April 17. Snows again.

It is remarkable how the American mind runs to statistics. Consider the number of meteorological observers and other annual phenomena. The Smithsonian Institution is a truly national institution. Every shopkeeper makes a record of the arrival of the first martin or bluebird to his box. Dod, the broker, told me last spring that he knew when the first bluebird came to his boxes, he made a memorandum of it: John Brown, merchant, tells me this morning that the martins first came to his box on the 13th, he "made a minute of it." Beside so many entries in their day-books and ledgers, they record these things.

Did not see a linaria the past winter, though they were the prevailing bird the winter before. There are

but few *F. hyemalis* about now; they appear to have gone north mostly on the advent of warmer weather about the 5th of April. I look up, these snowy days, and see purple finches silently feeding on the elms, when I have heard no sound. They sing somewhat like a robin, continuously, with a loud, canary-like *twee twee* and *che che che.* The tree sparrow is still the prevailing bird.

April 18. For three or four days the lilac buds have looked green, — the most advanced that I have seen. The earliest gooseberry still earlier in garden (though smaller buds).

P. M. — To stone-heaps by boat.

Scared up snipes on the meadow's edge, which go off with their strange zigzag, crazy flight and a distressed sound, — *craik craik* or *cr-r-ack cr-r-rack.* One booms now at 3 P. M. They circle round and round, and zigzag high over the meadow, and finally alight again, descending abruptly from that height. Was surprised to see a wagtail thrush, the golden-crowned,[1] at the Assabet Spring, which inquisitively followed me along the shore over the snow, hopping quite near. I should say this was the golden-crowned thrush without doubt, though I saw none of the gold, if this and several more which I saw had not kept close to the water. May possibly be the *aquaticus.* Have a jerk of the forked tail. The male yellow redpoll's breast and under parts are of a peculiarly splendid and lively yellow, — glowing. It is remarkable that they too are found about willows,

[1] *Vide* April 26. Probably hermit thrush.

etc., along the water. Saw another warbler[1] (*a*)[2] about the same size, in the same localities, — *somewhat* creeper-like, very restless, more like the Tennessee warbler than any, methinks. Light-slate or bluish-slate head and shoulders, yellowish backward, all white beneath, and a distinct white spot on the wing; a harsh grating note (?) (*b* ?).[3] Saw two wood ducks probably; saw a white spot behind eyes; they went off with a shriller *craik* than the black ducks.

I now feel pretty sure that they were crow blackbirds which I saw April 3d with the red-wings. They are stout fellows without any red epaulet, and go off with a hoarser *chuck chuck*, with rounded tail. They make that split singing, and, with the red-wing, feed along the water's edge. Heard a red-wing sing his *bobylee* in new wise, as if he tossed up a fourpence and it rattled on some counter in the air as it went up. Saw to-day a lesser blackbird, size of cowbird, *slaty-black*, on meadow edge. What was it?

The snow is sprinkled along the street with the large scales of buds from the trees; thus revealing what kind of *fall* is going on at this season.

April 19. Hear the tree sparrows at willow hedge-row this morning, — *ah ha ha yip yip yip yip*, or *twit-*

[1] *Vide* April 25.

[2] [This letter *a* and the *b* a few lines below are referred to on p. 220. The *b*, with the interrogation-point following it, was apparently inserted at a later date, and probably belongs only to the *note* described. Thoreau was perhaps uncertain at the time whether the note came from the bird he saw.]

[3] *Vide* April 25.

ter twitter twe twe twe, or *ah ha ha twitter twitter twe*, — very canary-like, yet clear, as if aspirated vowels alone, — no *t* or *r*.

Hear a pine warbler, — its note like the jingle of the *F. hyemalis*, — on an elm in the street.

Yesterday, as I was returning down the Assabet, paddling leisurely in the stern, the sun came out after two days of storm or louring weather and shone on the banks covered with snow. The water, which had been perfectly smooth all the afternoon, looked smoother yet, and I think that I never beheld so pure and refulgent a white as the upright snowy banks presented. Snow never looks so white in winter.

I had chosen to come to the river that afternoon, for there, the air being warm though the earth was covered with snow, there was least change. The few sparrows and warblers along the water's edge and on the twigs over the water seemed to forget the wintry prospect. I was surprised to find the river so full of sawdust from the pail-factory and Barrett's mill that I could not easily distinguish if the stone-heaps had been repaired. There was not a square three inches clear. And I saw the sawdust deposited by an eddy in one place on the bottom like a sand-bank a foot or more deep half a mile below the mill. That is a good stream to explore any summer weather, because the woods border it immediately and you can observe a greater variety of small birds. I can approach them more nearly in my boat than on foot. Melvin was inspecting his traps. From time to time masses of snow overhanging the water [fell] and floated saturated

down the stream. The calm, bright hour after the sun came out was very pleasant. I first saw the crescent of clear sky widening rapidly in the north-northwestern horizon, then the cheerful sunlight on hills and houses northward, and finally it shone out on the north bank and on myself and on the south shore; and one song sparrow, when he felt its influence, sang as if with a new influx of joy. How longed for by the birds! Farmer says that he saw a man catch a bluebird yesterday which was dying in the snow. As I watched the sparrow sitting in the cold shadow while the sun was already shining on the northern bank, I wondered that he did not at once fly to it, — ay, that he had not kept pace with the sun or fair weather from the first. But thus nature rules it, and these winged creatures wait to be shined on or shaded like ourselves. It was at this time, looking down the river, that I saw the two wood ducks sailing out from the shore in the smooth water, at first suspecting that they were tame. Birds are positively curious, — *e. g.* the thrush I saw that afternoon which hopped out to the end of the overhanging alders within a few feet to reconnoitre me and my boat.

This is the fifth day that the ground has been covered with snow. There first fell about four inches on the morning of the 15th. This had two thirds melted on the evening of the 16th. Then as much more fell on the 17th, with which to-night (evening of 19th) the ground is still more than half covered. There has been sleighing. I do not remember the like. The water was slightly skimmed over along the edge of the river this morning.

P. M. — To Cliffs.

The *Populus grandidentata* will not open for a day or two. There is considerable growth in the water at the Boiling Spring. The callitriche is most forward, a foot or more long, with its delicate or pretty cup-like whorls of leaves, floating on the surface. I see no signs of a blossom. What is that narrow tooth-leafed and red-stemmed plant which has grown nearly as much in the water? crosswise.[1] Then there is the cress next under way. Yet, on the whole, I think the columbine in the most favorable places about even with these. The latter have been less checked the last four or five days. I saw yesterday, at the bottom of the water, by the sides of the river, a *yellowish, half-unfolded* pad here and there. The green tinge from new-springing grass in the wet meadow as I looked low from my boat was much more obvious and springlike. I was struck the same day with the very rigid and sharp triangular points of a kind of sedge rising four or five inches above the water, perhaps that kind that makes the wreck in the fall. As if it were prepared to contend with the ice which forms in the night after it has started. That pretty little moss in beds on the rocks, etc., at the Cliffs shows its little reddish cup-like blossoms nowadays. A man was plowing in snow this morning. Saw a bullfrog in Hayden's pond-hole and a small green grasshopper. A turtle dove flew away from the birches and lit in his stubble-field, and each time when it flew I heard a note continuously uttered

[1] Veronica.

like a pigeon woodpecker or a robin at a distance. *Salix humilis* (?) out, — *i. e.* the *Salix* in Stow's field, — probably before the 15th; say 14th. The sweet-gale below Emerson's *to-day*, just out, — the male, with its amber dust.

I thought yesterday that the sparrows must rejoice to sit in the sun again and dry their feathers and feel its warmth. I read to-day that a boy found twenty-six bluebirds dead in a hollow tree on the 1st of April in Great Barrington. That was just after that long cold spell.

It is remarkable how scarce and silent the birds are even in a pleasant afternoon like this, compared with the morning. Within a few days the warblers have begun to come. They are of every hue. Nature made them to show her colors with. There are as many as there are colors and shades. In certain lights, as yesterday against the snow, nothing can be more splendid and celestial than the color of the bluebird. On the creeping juniper there appear to be buds, but not blossoms yet.

Do I ever see the marsh hawk?[1] Is it not the sharp-shinned which I have mistaken for it? A man came to me yesterday to offer me as a naturalist a two-headed calf which his cow had brought forth, but I felt nothing but disgust at the idea and began to ask myself what enormity I had committed to have such an offer made to me. I am not interested in mere phenomena, though it were the explosion of a planet, only as it may have lain in the experience of a human being.

[1] I think the early large hawk was it.

April 20. A. M. — To Nawshawtuct.

Heard on the 14th a singular note on or near the hill, like a guinea-hen or other fowl, or a squeaking pump-handle. Heard [it] again this morning, and saw two large dark birds go off from a walnut with a loud squeaking *quack*. Is it a strange large woodpecker? or possibly a teal? Heard the same at starlight, — *ker-chuck ker-chuck ker-chuck*. I think it is the red-wing only sings *bobylee*. Saw one pursuing a female (?). I am not sure whether these or the crow blackbirds are the earliest. Saw a small black-striped warbler or flycatcher (?) (*c*) [1] on a willow. Hear the *long*-drawn scold of a flicker, sounding very loud over the water.

P. M. — To Island and Hill.

A willow coming out fairly, with honey-bees humming on it, in a warm nook, — the most forward I have noticed, for the cold weather has held them in check. And now different kinds of bees and flies about them. What a sunny sight and summer sound! A striped snake on a warm, sunny bank. The painted tortoises are fairly out sunning to-day. A very pleasant and warm afternoon; the earth seems to be waking up. Frogs croak in the clear pools on the hillside where rocks have been taken out, and there is frog-spawn there, and little tadpoles are very lively in the sunny water.

I find some advantage in describing the experience of a day on the day following. At this distance it is more ideal, like the landscape seen with the head inverted, or reflections in water.

[1] [See p. 213.]

4 P. M. — To Moore's Swamp.

Red maple in a warm place shows anthers, and will open to-morrow if pleasant; say 22d. In the ditch in the Brown meadow, several yellow lily buds pushed up four or five inches. But water plants *on the whole* not decidedly ahead of land or air plants. The pine warbler on the oaks, running about somewhat creeper-like and now and then uttering a loud ringing *vetter vetter vetter vetter vetter vet* faster and faster, with its bright-yellow throat and forked tail.

At starlight by riverside a few faint stertorous sounds from the awakening meadow, and one or two faint bullfrogish notes, — *er-er-er*. The sound of the snipes, winnowing the evening air now at starlight, visible but for an instant high over the meadows, is heard far into the village, — *hoo hoo hoo hoo hoo hoo*, rising higher and higher or dying away as they circle round, — a ghostly sound. Is that bittern-like squeak made by them? I do not mean the nighthawk-like squeak.

April 21. 6 A. M. — Heard the bay-wing sparrow[1] in the redeemed meadows. None yesterday morning. At a distance hear only the end of its strain, like the ring of a small piece of steel dropped on an anvil. A few *F. hyemalis* still about. Are not those little whorls of black pointed scales the female blossom of the *Thuya occidentalis?*

Scarcely an April shower yet.

How can a man be a wise man, if he does n't know

[1] ["Bay-wing" is crossed out in pencil, and "one of the seringos" written over it.]

any better how to live than other men? — if he is only more cunning and intellectually subtle? Does Wisdom work in a treadmill? Does Wisdom fail? or does she teach how to succeed by her example? Is she merely the miller who grinds the finest logic? Did Plato get his *living* in a better way or more successfully than his contemporaries? Did he succumb to the difficulties of life like other men? Did he merely prevail over them by indifference, or by assuming grand airs? or find it easier to live because his aunt remembered him in her will? [1]

P. M. — To Saw Mill Brook.

As I was handling the arbor-vitæ to-day, an odor like strawberries came from [it]. Is that terebinthine? The lilac is beginning to open to-day. The snows go off and the lustre of the wintergreen is undiminished. The large black ants are at work on their hills. The great scalloped leaf betrays the *P. grandidentata*. How silent and deserted the woods are! I do not fairly see a chickadee even. Snow with its tracks would make it seem more inhabited. How we prize any redness on the ground! — a red stain in a stone or even a coxcomb lichen on a stump! The hellebore at the brook has shot up six or eight inches with its compact bundles and will soon catch the cabbage. It is *now* one of the most forward plants. That gooseberry at the brook is the most forward shrub or tree at present that I can find out of doors in Concord.[2] It shows more of a leaf than

[1] [*Cape Cod, and Miscellanies*, pp. 462, 463; *Misc.*, Riv. 263.]

[2] [Later:] Excepting the spiræa. [Later still:] The thimble-berry in some places equally forward, and perhaps the honeysuckle vine.

the lilac or Missouri currant, which may come next. As I go up the hill beyond the brook, while the hylodes are heard behind, I perceive the faintest possible flower-like scent as from the earth, reminding me of anemonies and houstonias. Can it be the budded mouse-ears under my feet? Downy-swaddled, they lie along flat to the earth like a child on its mother's bosom. I sit on a rock awhile just below the old trough. These are those early times when the rich golden-brown tassels of the alders tremble over the brooks — and not a leaf on their twigs. We are far north with Sir John Franklin. I see the first of that bent lake grass on the smooth surface of a flooded meadow, with a dimple at its stem. It is a warm sight. The fruit of the *O. spectabilis* (?), flowering fern, still perfect. I see on the red cedar the male blossom buds not yet quite open, and very minute hollows with whitish scales at the ends of some of the branchlets, which I take to be the female flowers.

The song of the purple finch on the elms (he also frequents firs and spruce) is rich and continuous, like, but fainter and more rapid than, that of a robin, — some of the *cherruwit* in it and a little of the warble of the martin. A martin was found dead the 18th after the snows, and many bluebirds in Brookfield.

April 23. A kingfisher with his *crack, — cr-r-r-rack.* Rain yesterday and to-day; yet this morning the robin sings and the blackbirds and, in the yard, the tree sparrow, hyemalis, and song sparrow. A rain is sure to bring the tree sparrow and hyemalis to the gardens.

I suppose it must be the seeds of weeds which they are so busily picking from the bare ground, which their sharp eyes detect. George Minott says that he used to shoot the red-headed woodpecker, and found their nests on the trees on his hillside. He used to steal up to the pigeon woodpeckers' holes and clap his hand over them and take out the old bird; then let her go.

The first April showers are even fuller of promise and a certain moist serenity than the sunny days. How thickly the green blades are starting up amid the russet! The tinge of green is gradually increasing in the face of the russet earth.

Now that the very earliest shrubs are beginning to unfold, — spiræa, gooseberry, honeysuckle vine, lilac, Missouri currant, — many herbaceous plants, not evergreen merely, make quite a show, as the skunk-cabbage in favorable places, nuphar in the *most favorable* places though muddy yellow and dilapidated, callitriche and the narrow tooth-leafed water plant, etc., etc., cowslip, columbine (cress and chrysosplenium, — are not both chiefly evergreen?), celandine, catnep, saxifrage, dandelion, clover, golden senecio, sweet flag, hellebore (the most forward buds begin to open), thistle, shepherd's-purse, meadow saxifrage, elder probably.

As for the birds, I have this to remark: The crows still frequent the meadows. The lark sings morning and evening. The blackbirds — red-wing and crow — have since their arrival kept up their *bobylee* and chattering and split notes on the willows and maples by the river and along the meadow's edge. They appear

to depend much (as well as crows and robins) on the meadow, just left bare, for their food. They are the noisiest birds yet. Both still fly in flocks, though the male red-wings have *begun* to chase the females. Robins still frequent the meadows in flocks and sing in the rain. The song sparrows not in such flocks nor singing so tumultuously along the watercourses in the morning as in the last half of March. How wary they are! They will dodge you for half an hour behind a wall or a twig, and only a stone will make them start, looking every which way in a minute. So the blackbirds, both kinds, sidle till they bring a twig between me and them. The flock of black ducks which stayed by so long is now reduced to a quarter part their number. Before the 4th or 5th of April the *F. hyemalis* was apparently the most abundant bird of any, in great drifting flocks with their lively jingle, their light-colored bill against slate breasts; then, on the advent of warmer weather, the greater part departed. Have the fox sparrows gone also? I have not seen them of late. As for hawks, after the one or two larger (perhaps) hen-hawks in the winter and a smaller one in December (?), the first were *large* marsh (?) hawks on trees on the meadow edge or skimming along it; since which the eagle, the sharp-shinned, and the smaller brown and white-rumped over meadows, which may be the same, etc., etc. Have seen the black duck, golden-eye, merganser, blue(?)-winged teal, wood duck. The golden-eye seems to have gone. Heard a nuthatch yesterday, April 22d. The tree sparrows are the prevailing bird on ground, and most numerous of any

for the past month except one while the hyemalis. They are a chubby little bird with a clear chestnut crown, a dark spot on the otherwise clear whitish breast, and two light bars on the wings. The pigeon woodpecker now scolds long and loud morning and evening. The snipes are still feeding on the meadows. The turtle dove darts solitary about as if lost, or it had lost its mate. The yellow redpoll, with a faint clear *chip*, is the commonest *yellow* bird on hills, etc., about water. The chip sparrow does not sing much in morning yet. New kinds of warblers have begun to come within a few days. I saw yesterday the smoke of the first burning of brush which I have noticed, though the leaves cannot be very dry yet.

P. M. — To Lee's Cliff on foot.

It has cleared up. At Ivy Bridge I see the honey-bees entering the crypts of the skunk-cabbage, whose tips have been bitten by the frost and cold. The first sweet-gale, which opened a day or two ago on the sunny sides of brooks where the sun reached it above the bank, was an interesting sight, full of amber dust. Those are blossom, not leaf buds, so forward on the shad-bush. The myrtle-bird, — yellow-rumped warbler, — was not this warbler *c* of the 20th? — on the willows, alders, and the wall by Hubbard's Bridge, slate and white spotted with yellow. Its note is a *fine*, rapid, somewhat hissing or whistling *se se se se se ser riddler se, somewhat* like the common yellowbird's. The yellow redpolls are very common on the willows and alders and in the road near the bridge. They keep jerking their tails. I heard one male sing a jingle

like *che ve ve ve ve vē*, very fast, and accenting the last syllable. They are quite tame. I sit awhile on the lee side of Conant's Wood, in the sun, amid the dry oak leaves, and hear from time to time the *fine* ringing note of a pine warbler, which I do not see. It reminds me of former days and indescribable things. Swarms of those little fuzzy gnats now make a faint humming about the railing of the bridge. The bay-wing has a light ring at some distance around the eye. It is also too dark for my prisoner of the 15th.

Saw my white-headed eagle again, first at the same place, the outlet of Fair Haven Pond. It was a fine sight, he is mainly — *i. e.* his wings and body — so black against the sky, and they contrast so strongly with his white head and tail. He was first flying low over the water; then rose gradually and circled westward toward White Pond. Lying on the ground with my glass, I could watch him very easily, and by turns he gave me all possible views of himself. When I observed him edgewise I noticed that the tips of his wings curved upward slightly the more, like a stereotyped un-dulation. He rose very high at last, till I almost lost him in the clouds, circling or rather *looping* along west-

ward, high over river and wood and farm, effectually concealed in the sky. We who live this plodding life here below never know how many eagles fly over us.

They are concealed in the empyrean. I think I have got the worth of my glass now that it has revealed to me the white-headed eagle. Now I see him edgewise like a black ripple in the air, his white head still as ever turned to earth, and now he turns his under side to me, and I behold the full breadth of his broad black wings, somewhat ragged at the edges. I had first seen two white ducks far off just above the outlet of the pond, mistaking them for the foaming crest of a wave. These flew soon, perhaps scared by the eagle. I think they were a male and female red-breasted merganser (though I did [not] see the red of the breast), for I saw his *red bill*, and his head was not large with a crest like the golden-eye; very white on breast and sides, the female browner.[1] As ducks often do, they first flew directly and unhesitatingly up the stream, low over the water, for half a mile, then turned and came down, flying thirty or forty feet above the water, the male leading till they were out of sight. This is the way with them, I notice; they first fly in one direction and then go off to alight in another. When they came down the river, the male leading, they were a very good example of the peculiar flight of ducks. They appeared perfectly in a line one behind the other. When they are not they preserve perfect parallelism. This is because of their long necks and feet, — the wings appearing to be attached midway, — and moreover, in this case, of their perfectly level flight, as if learned from skimming over the water. Directly after rose two blue herons from the meadow.

I find but one red maple fairly in blossom on a few

[1] Certainly mergansers, probably sheldrakes.

twigs over the water to-day. I think, therefore, the 22d will do for the very earliest. Had a glimpse of a very small warbler (*b'*) on a pitch pine, and heard a pleasant and unusual whistle from him.[1] The slippery elm, with its dull-pinkish (?) blossoms now fully out. I think on account of the snow it could not have opened before the 18th. The sedge was abundant long before the crowfoot or saxifrage was. It must be put earlier than I have allowed. Crowfoot is not yet abundant, though it was earlier than saxifrage, which has now gone ahead. A thimble-berry under this cliff is at least as forward as any gooseberry. I find a new plant, now six or eight inches high, and which will blossom in two or three days, the *Arabis lævigata* (?).[2] The columbine is well budded. Some alders are still handsome. Here is a *common* one, — very handsome drooping clusters of three, four, or five reddish-brown and greenish-yellow catkins, two to three inches long, with the small reddish female blossoms stretched over them. How the hazel catkins elongate themselves at last!

April 24. Monday. A. M. — Up railroad.

The river slightly risen again owing to rain of yesterday morn and day before. Its greatest height this year was the 17th of March. This is the next rise of any consequence. As I stand still listening on the frosty sleepers at Wood's crossing by the lupines, I hear the loud and distinct *pump-a-gor* of a stake-driver. Thus he announces himself. I find the shepherd's-purse open in Cheney's garden at last. It has run up eight or

[1] Was it *b* of the 18th? *Vide* April 25. [2] *Vide* May 1st.

ten inches in some places, and *may* have been open a week; but say just after the snow, or the 19th. After a very mild winter, like that of '52 and '53, it will be one of the very earliest flowers, — say second, or next after the chickweed, — but last winter it was killed down by the cold. Yet it is hardier and more forward now than the chickweed, which is still dead and bleached. Saw a black blackbird without red, with a purplish-green-black neck, and somewhat less than a red-wing, in company with two smaller slaty-black females (?). Can they be rusty grackles?[1]

P. M. — Up Assabet, and thence to Cedar Swamp.

The larch will apparently blossom in [one] or two days at least, both its low and broad purple-coned male flowers and its purple-tipped female cones.[2] Its little leaf-bundles are beginning to burst. Heard amid the white cedars the fine, clear singing warbler of yesterday, whose harsh note I *may* have heard the 18th, — *twer er te te, twer er te te, twer er te te tèr*, but very clear and fast. Go to new trees, like cedars and firs, and you hear new birds. They increase the strangeness. Also other strange plants are found there. I have also observed that the early birds are about the early trees, like maples, alders, willows, elms, etc.

The white cedar female blossoms are open, and as the brown male ones are loosened the next day in the house, I think the 25th may be called their first day. I find a raspberry (thickly clothed with bristles) in this swamp, as early as the thimble-berry. This, then,

[1] *Vide* May 9th. [2] *Vide* May 1st.

might be put after the gooseberry among native plants, because this is not so much indebted to a favorable position, — the gooseberry not at all, — growing in a sheltered, *i. e.* covered, swamp. New plant [1] flower-budded at Cedar Swamp amid the high blueberry, panicled andromeda, clethra, etc., etc., — upright dense racemes of reddish flower-buds on reddish terminal shoots.

Saw a large thin whitish fungus or spunk, fourteen and three quarters inches by eight and a half from the tree and two or three thick, with concentric growths of various thickness, within a foot of the ground on a maple stump. There was a grape-vine and some other small plants grown directly through, which it had apparently grown round. The first red maple blossoms — so very red over the water — are very interesting. Saw a very *large* hawk, slaty above and white beneath, low over river. Was it not a goshawk? The kingfisher flies with a *crack cr-r-r-ack* and a limping or flitting flight from tree to tree before us, and finally, after a third of a mile, circles round to our rear. He sits rather low over the water. Now that he has come I suppose that the fishes on which he preys rise within reach. Are not they bank swallows [2] sailing so thick over the river, now at 5.30 P. M.?

April 25. A. M. — I think I hear near George Heywood's the *tull-lull* (?).[3] Heard and saw my warbler (?) *b'* [4] of the 23d and 24th on Mr. Emerson's

[1] Racemed andromeda.
[2] [Barn swallows.] *Vide* 29th.
[3] Yes.
[4] *Vide* [p. 220].

pines. It is the smallest bird I have seen this year. Sits still amid the pines not far below the top and sings very sweetly, loud and clear, and seems further off than it is, beginning first with very *fine* wiry notes and then increasing in volume and melody till it ends with *tweeter tweeter tweeter ter twe*. Some of it a martin-like warble. Has sometimes a harsh scolding note. It is all light, perhaps ashy-white, beneath; has a little narrow forked tail; ashy (?) under wings, which are considerably shorter than tail; and light above and below eye; perhaps a whitish bar on wings; olivaceous (?) above. I think it may be the *golden-crested wren*, though I hardly saw the upper parts, or *possibly* the small blue-gray flycatcher. I do not find the *male* blossoms of the red cedar open yet.

P. M. — To Indian Cedar Hill.

Quite warm and the frogs are snoring on the meadow. I swelter under my greatcoat. The *Populus grandidentata* is fairly begun; say very first the 23d. Many shad-flies in the air and alighting on my clothes. The summer approaches by almost insensibly increasing *lieferungs* of heat, each awakening some new bird or quadruped or reptile. At first we were compelled to take off our mittens, then to unbutton our greatcoat, and now, perhaps, to take it off occasionally (I have not left it at home yet), and wear thin boots. For some time we have done with little fire, nowadays let it go out in the afternoon. (To-day, 26th, I sit without any.) Each creature awaits with confidence its proper degree of heat. I think I saw a pigeon

yesterday. G. Minott says that he saw some a week ago.

Saw a golden-crested wren [1] in the woods near Goose Pond. (This must be my warblers *a* and *b* of April 18th, *b'* of April 23d and 24th.) It sounded far off and like an imitation of a robin,[2] — a long strain and often repeated. I was quite near it before I was aware of it, it sounding still like a faint imitation of a robin. Some chickadees and yellow redpolls were first apparent, then my wren on the pitch pines and young oaks. He appeared curious to observe me. A very interesting and active little fellow, darting about amid the tree-tops, and his song quite remarkable and rich and loud for his size. Begins with a very fine note, before its pipes are filled, not audible at a little distance, then *woriter weter*, etc., etc., winding up with *teter teter*, all clear and round.[3] This was at 4 P. M., when most birds do not sing. I saw it yesterday, pluming itself and stretching its little wings. Our smallest bird, methinks, except the hummingbird. The snuff-colored, white-spotted wren I saw some time ago was considerably larger.

Just before this saw on the low bushes, — shrub oaks, etc., — by path, a large sparrow with ferruginous-brown and white-barred wings, — the white-throated sparrow, — uttered a faint ringing chirp. The first partridge drums in one or two places, as if the earth's pulse now beat audibly with the increased flow of life.

[1] ["Golden" crossed out in pencil and "ruby" substituted.]

[2] And of a golden robin, which later I often mistook for him.

[3] His song is comical and reminds me of the thrasher.

It slightly flutters all Nature and makes her heart palpitate. Also, as I stand listening for the wren, and sweltering in my greatcoat, I hear the woods filled with the hum of insects, as if my hearing were affected; and thus the summer's quire begins. The silent spaces have begun to be filled with notes of birds and insects and the peep and croak and snore of frogs, even as living green blades are everywhere pushing up amid the sere ones. I heard that same snoring which I hear on the river meadows, on an inland meadow this afternoon, where I think no bullfrogs are. Are they not then the *palustris*, or else the shad frog? There are now many new insects in the air. Black ducks still on Flint's. The fertile fruit-stems of the sensitive fern by the side of the Flint's Pond path, more than a foot high, are a rich ornament to the ground, — brown, four or five inches long, and turned to one side, contrasting with the lighter rachis (?). Saw my thrush of the 18th by the pond. It appears dark-olive, ferruginous on rump and tail, with a dark streak slanting from each cheek and flesh-colored legs. The red cedar has fairly begun to-day; maybe the first yesterday. Put the red yesterday and the white to-day. As I approach the red cedars now, I perceive a delicious strawberry-like fragrance in the air, like that from the arbor-vitæ. The creeping juniper apparently open, but not yet open. Though I see some amber on the sweet-fern, I am in doubt whether to say to-day or to-morrow. The wild red cherry (if that is one near Everett's), privet, and buckthorn are *beginning* to leaf out. The abele will probably blossom to-morrow.

April 26. Heard at 8 A. M. the peculiar loud and distinct ring of the first toad, at a distance. April-morning weather, threatening showeriness.

2.30 P. M. — To Lee's Cliff on foot.

A still, warm, overcast day with a southwest wind (this is what the Indians made so much of), and the finest possible dew-like rain in the air from time to time, now more of the sun. It is now so warm that I go back to leave my greatcoat for the first time, and the cooler smell of possible rain is refreshing. The toads ring more or less.

> When the toads begin to ring,
> Then thinner clothing bring,
> Or off your greatcoat fling.

It is not yet time for thin clothes. Did I hear a tree-toad to-day? As I go over Hubbard's land I see A. Wheeler burning brush, clearing up on Fair Haven. Great volumes or clouds of white smoke are blown gently northeastward, while the bright-scarlet flame is seen here and there creeping along its edge. They begin to burn on the lee side. The farmers are now busily plowing, *some* setting out roots and planting. I seem to perceive a slight fragrance in the air.

Found part of a bird's head and bill, — I think that of the thrush I saw on the 18th and yesterday. The bill (with notch) and what part of the head is left are exactly like the hermit thrush in F. Brown's collection, except that mine is yellow inside bill (but his has probably faded); and I see that the latter's legs, which W. calls dusky, are light enough for my bird, and the colors above — olivaceous, and foxy rump

and tail — are the same, but the hermit thrush's spots on breast appear darker. I think I have seen or heard of more dead birds than usual this season, — read of bluebirds, heard of a martin (both killed by cold), also seen a dead robin or two and this thrush.

The woods are full of myrtle-birds this afternoon, more common and commonly heard than any, especially along the edge of woods on oaks, etc., — their note an oft-repeated fine jingle, *a che' che, che' che, che' che*, or *a tweedle tweedle tweedle tweedle-twe*. As I heard the *tull lull* from the same quarter from time to time, I think it came from it. Perhaps it may be written, *a tea le, tea le, tea le*. These small birds — and all small birds — seen against the sky at a little distance look black. There is not breadth enough to their colors to make any impression; they are mere motes, intercepting the light, the substance of a shadow.

Birds sing all day when it is warm, still, and overcast as now, much more than in clear weather, and the hyla too is heard, as at evening. The hylodes commonly begins early in the afternoon, and its quire increases till evening. I hear now snipes far over the meadow incessantly at 3.15 P. M. The men bogging in the meadow do not hear them, and much else.

The swamp sparrow, very dark, with chestnut and black, and quirk of the tail, flits shyly under the alders along the causeway; hides or lurks behind the trunks like song sparrow and hardly rests a moment in one place.

The lark on the top of an apple tree sings *a tchea te*

che, then perhaps *tche tchea*, only a plaintive clear round note. Hear the first chewink hopping and chewinking among the shrub oaks.

To-day the air is full of birds; they attend the opening of the buds. The trees *begin* to leaf, and the leaf-like wings of birds are in the air. The buds start, then the insects, then the birds. Saw probably a pigeon hawk skim straight and low over field and wood, and another the next day apparently dark slate-color. It is warm and still, almost sultry, as if there might be a thunder-shower before night. Now look down on Fair Haven. How pleasant in spring a still, overcast, warm day like this, when the water is smooth! The sweet-gale in blossom, forming islets surrounded by water, on the meadow, looks like sere brown leaves left on. At the Cliff the *Arabis lævigata*[1] is just out to-day; the honeysuckle will be, say, the very earliest, to-morrow.[2] A barberry bush quite forwardly leafing under the rock, and a young apple. The early gooseberry quite green.

9 P. M. — Quite a heavy thunder-shower, — the second lightning, I think.

The vivid lightning, as I walk the street, reveals the contrast between day and night. The rising cloud in the west makes it very dark and difficult to find my way, when there comes a flash which lights up the street for a moment almost as brightly as the day, far more so than moonlight, and I see a person on the sidewalk before me fifty rods off.

[1] Probably *T. stricta*. [2] *Vide* May 1st.

April 27. 7 A. M. — To Cliffs.

Equisetum arvense on the railroad; and may have been two or three days — did not look. I am at length convinced of the increased freshness (green or yellow) of the willow bark in the spring. Some a clear yellow, others a delightful liquid green. The bark peels well now; how long? The rain of last night is helping to bring down the oak leaves. The wood thrush afar, — so superior a strain to that of other birds. I was doubting if it would affect me as of yore, but it did measurably. I did not believe there could be such differences. This is the gospel according to the wood thrush. He makes a sabbath out of a week-day. I could go to hear him, could buy a pew in his church. Did he ever practice pulpit eloquence? He is right on the slavery question. The brown thrasher, too, is along. I find a thread-like stamen now between the nutlets of the callitriche — probably three or four days. Some creature appears to have eaten this plant. The yellow redpolls still numerous; sing *chill lill lill lill lill lill.* The meadow-sweet and sweet-fern are *beginning* to leaf, and the currant in garden.

Stood on Cliffs about 7 A. M. Through a warm mistiness I see the waters with their reflections in the morning sun, while the wood thrush and huckleberry-bird, etc., are heard, — an unprofaned hour. I hear the black and white creeper's note, — *seeser seeser seeser se.*[1] What a shy fellow my hermit thrush![2] I hear the

[1] *Vide* May 1st.

[2] [Probably it was the hermit thrush, not the wood thrush, for which the date is too early, whose song he had been praising.]

beat of a partridge and the spring hoot of an owl, now at 7 A. M. Hear a faint sort of oven-bird's (?) note.

It is only the irresolute and idle who have no leisure for their proper pursuit. Be preoccupied with this, devoted to it, and no accident can befall you, no idle engagements distract you. No man ever had the opportunity to postpone a high calling to a disagreeable *duty*. Misfortunes occur only when a man is false to his Genius. You cannot hear music and noise at the same time. We avoid all the calamities that may occur in a lower sphere by abiding perpetually in a higher. Most men are engaged in business the greater part of their lives, because the soul abhors a vacuum, and they have not discovered any continuous employment for man's nobler faculties. Accordingly they do not pine, because they are not greatly disappointed. A little relaxation in your exertion, a little idleness, will let in sickness and death into your own body, or your family and their attendant duties and distractions. Every human being is the artificer of his own fate in these respects. The well have no time to be sick. Events, circumstances, etc., have their origin in ourselves. They spring from seeds which we have sown. Though I may call it a European War, it is only a phase or trait in my biography that I wot of. The most foreign scrap of news which the journals report to me — from Turkey or Japan — is but a hue of my inmost thought.

Forbes says that the guides who crossed the Alps with him lost the skin of their faces, — apparently from the reflection from the snow.

It is remarkable that the rise and fall of Walden,

though unsteady, and whether periodical or merely occasional, are not completed but after many years. I have observed one rise and part of two falls. It attains its maximum slowly and surely, though unsteadily. It is remarkable that this fluctuation, whether periodical or not, requires many years for its accomplishment, and I expect that a dozen or fifteen years hence it will again be as low as I have ever known it.[1]

The *Salix alba* begins to leaf, and the catkins are three quarters of an inch long. The balm-of-Gilead is in bloom, about one and a half or two inches long, and some hang down straight. Quite warm to-day. In the afternoon the wind changed to east, and apparently the cool air from the sea condensed the vapor in our atmosphere, making us think it would rain every moment; but it did not till midnight.

April 28. 6 A. M. — Dug up two of half a dozen, the only black spruce suitable to transplant that I know hereabouts.

Rain all day, making the grass look green.

Nawshawtuct now in the rain looks about as green as a Roxbury russet; *i. e.*, the russet is yielding to the green. Perhaps the greenness of the landscape may be said to begin fairly now. For the last half of this month, indeed, a tinge of green has been discernible on the sides of hills. Saw yesterday some cows turned out to pasture on such a hillside; thought they would soon eat up all the grass. This is coincident, then, with the leafing of the gooseberry, or earliest native shrub.

[1] [*Walden*, p. 201; Riv. 283, 284.]

First, you may say, is the starting of a few radical leaves, etc., and grass blades in favorable localities, and the blossoming of the earliest trees and herbs.

Secondly, during the last half of April the earth acquires a distinct tinge of green, which finally prevails over the russet.

Third. Then begins the leafing of the earliest shrubs and trees and the decided greenness and floweriness of the earth, in May.

Fourth. Then the decided leafiness in June and the first great crop of the year, the leaf or grass crop.

April 29. The ideal of a market is a place where all things are bought and sold. At an agricultural meeting in New York the other day, one said that he had lately heard a man inquiring for spurry seed; he wanted it to sow on drifting sand. His presumption had been that if he wanted it, *i. e.*, if there was a demand, there was a supply to satisfy that demand. He went simply to the shop instead of going to the weed itself. But the supply does not anticipate the demand.

This is the second day of rain, and the river has risen about as high as any time this year.

P. M. — To Cliffs by boat in the misty rain.

The barn swallows are very numerous, flying low over the water in the rain. I think that those which I saw on the 24th were barn and not bank swallows. What an entertainment this river affords! It is subject to so great overflows, owing to its broad intervals, that a day's rain produces a new landscape. Let it rain *heavily* one whole day, and the river will be in-

creased from half a dozen rods in width to nearly a mile in some places, and, where I walked dry-shod yesterday a-maying, I sail with a smacking breeze to-day, and fancy that I am a sailor on the ocean. It is an advantage which all towns do not possess. Off the Cliffs, I met a blue heron flying slowly downstream. He flaps slowly and heavily, his long, level, straight and sharp bill projecting forward, then his keel-like neck doubled up, and finally his legs thrust out straight behind. His wings, as I looked after him, presented this outline: He alighted on a rock, and stood erect awhile.

I am surprised to find a few andromedas out, just behind the alders at the oak on Cardinal Shore. Possibly yesterday the very first, though it rained. At last I find one houstonia just out there.

The mouse-ear is now fairly in blossom in many places. It never looks so pretty as now in an April rain, covered with pearly drops. Its corymbs of five heads with one in the centre (all tinged red) look like a breast-pin set with pearls.

J. Farmer says that this rain will kill many caterpillars just hatched.

As nearly as I can remember and judge, plants were *generally* out at the following dates:—

White maple	April 7	Hazels	April 12
Alders	8	*Populus tremuloides*	14
Skunk-cabbage	9	Crowfoot	13
Sedge	11	Saxifrage	13
Earliest willows fairly begun (not common till April 20)	12	Slippery elm	22
		Common elm	12

Cowslip	April 24	Red cedar	April 26
Sweet-gale	23	White [cedar]	27 (?)
Salix humilis	23	*Populus grandidentata*	26
Red maple	26	Field horse-tail	28
Larch	28 (?)	Mouse-ear	29

VI

MAY, 1854

(ÆT. 36)

May 1. A fine, clear morning after three days of rain, — our principal rain-storm this year, — raising the river higher than it has been yet.

6 A. M. — Up railroad.

Everything looks bright and as if it were washed clean. The red maples, now fully in bloom, show red tops at a distance. Is that a black cherry so forward in the cow-killer? When I first found the saxifrage open, I observed that its leaves had been eaten considerably.

9 A. M. — To Cliffs and thence by boat to Fair Haven.

I see the scrolls of the ferns just pushed up, but yet wholly invested with wool. The sweet-fern has not yet blossomed; its anthers are green and close, but its leaves, just beginning to expand, are covered with high-scented, amber-like dots. Alder leaves begin to expand in favorable places. The viburnum (*Lentago* or *nudum*) leaves unexpectedly forward at the Cliff Brook and about Miles Swamp. I am not sure that I distinguish the *nudum* now, but suspect the other to be most forward. Snakes are now common on warm

banks. At Lee's Cliff find the early cinquefoil. I think that the columbine cannot be said to have blossomed there before to-day, — the very earliest. A choke-cherry is very strongly flower-budded and considerably leaved out there. The early rose is beginning to leaf out. At Miles Swamp, benzoin will apparently open to-morrow, before any leaves begin. The creeping juniper appears to be now just in bloom. I see only the female flower.

I sail back with a fair southwest wind. The water is strewn with myriads of wrecked shad-flies, erect on the surface, with their wings up like so many schooners all headed one way. What an abundance of food they must afford to the fishes! Now and then they try to fly, and fall on the water again. They apparently reach from one end of the river to the other, one to a square yard or two. The scleranthus is out and a tuft of that brownish-flowered kind of sedge.

P. M. — Up Assabet by boat to Cedar Swamp.

The earliest shrubs and trees to leaf have been thus far in this order: The earliest gooseberry (in garden and swamp), raspberries, thimble-berry (perhaps in favorable places only), wild red cherry (if that is one near Everett's),[1] meadow-sweet, (red currant and second gooseberry, I think, here), sweet-fern (but is *very* slow to go forward), *S. alba* (April 27), and also a small dark native willow, young black cherry (if that is one in the cow-catcher, and others are as forward), choke-cherry, young shoots, viburnum (am not sure if

[1] *Vide* May 5. It is.

Lentago is earlier than *nudum;* as both are leafing, put the *Lentago* first and *nudum* next), diervilla (if that light-stemmed plant on Island is it),[1] barberry (perhaps in favorable places only), and some young apples in like places, alders (in favorable places), early rose.

Saw two black ducks. Have seen no *F. hyemalis* for five or six days. Hear a golden-crested wren at Cedar Swamp. I think that I may have mistaken the note of the mrytle-bird for that of the creeper the other morning. A peetweet, and *methinks* I have heard it a day or two.

I have seen Goodwin and Haynes all day hunting muskrats and ducks, stealthily paddling along the river-side or by the willows and button-bushes, now the river is so high, and shooting any rat that may expose himself. In one instance a rat they had wounded looked exactly like the end of an old rider stripped of bark, as it lay just on the surface close to the shore within a few feet of them. Haynes would not at first believe it a muskrat only six or eight feet off, and the dog could not find it. How pitiful a man looks about this sport! Haynes reminded me of the Penobscots.

Early starlight by riverside.

The water smooth and broad. I hear the loud and incessant cackling of probably a pigeon woodpecker, — what some time since I thought to be a different kind. Thousands of robins are filling the air with their trills, mingling with the peeping of hylodes and ringing of frogs [*sic*]; and now the snipes have just begun

[1] *Vide* May 5.

their winnowing sounds and squeaks, and I hear Barrett's sawmill beside; and whenever a gun fires, Wheeler's peacock screams.

The flowers of the larch which I examined on the 24th *ult.* have enlarged somewhat and may now certainly be considered in blossom, *though the pollen is not quite distinct.* I am not certain whether the 26th was not too early. The crimson scales of the female cones are still more conspicuous.

May 2. The cracks in the ground made by the frost last winter are still quite distinct.

It is the young black cherry which is so forward now.

May 3. P. M. — In rain to Nawshawtuct.

The river rising still. What I have called the small pewee on the willow by my boat, — quite small, uttering a short *tchevet* from time to time. Some common cherries are quite forward in leafing; say next after the black. The *Pyrus arbutifolia*, of plants I observed, would follow the cherry in leafing. It just begins to show *minute* glossy leaves. The meadow-sweet begins to look fairly green, with its little tender green leaves, making thin wreaths of green against the bare stems of other plants (this and the gooseberry), — the next plant in this respect to the earliest gooseberry in the garden, which appears to be the same with that in the swamp. I see wood turtles which appear to be full and hard with eggs. Yesterday I counted half a dozen dead yellow-spotted turtles about Beck Stow's. There

is a small dark native willow in the meadows as early to leaf as the *S. alba*, with young catkins. *Anemone nemorosa* near the ferns and the sassafras appeared yesterday. The ferns invested with rusty wool (*cinnamomea?*) have pushed up eight or ten inches and show some of the green leaf.

May 5. P. M. — To Boiling Spring, Laurel Glen, and Hubbard's Close.

I observe the following plants, leafing in about this order, to be added to the list of May 1st: —

Elder has made shoots two or three inches long, — much more than any other shrub or tree, — but is not common enough to show. Possibly it should rank with or next to the gooseberry.
Mountain-ash, larger leaves now than any tree, and the first tree to show green at a little distance.
Cultivated cherry.
Pyrus arbutifolia.
Horse-chestnut.
Hazel just passing from buds to leaves.
Late gooseberry in gardens.
Early apples.
Probably pears.
Wild red cherry in woods.
Dwarf or sand cherry.
Hardhack.
Diervilla near Laurel Glen (comes on fast after this).[1]
Low blackberry.
Some young red maple buds begin to expand.

Against the wall in front of young Farrar's house a scroll-shaped slender fern now three inches high; stem invested with narrow shining brown scales one third

[1] May 11, is *one* of the most forward of all.

of an inch long. The *Salix tristis* now out (not out May 1st), appeared the 3d. The same of the sweet-fern. The red maple keys are now about three quarters of an inch long (with stems). I see no leaves on black, red, or shrub oaks now, — their buds expanding and showing a green or yellowish point, — but they still hang on the white oak.

May 3d and 4th, it rained again, — especially hard the night of the 4th, — and the river is now very high, far higher than in any other freshet this year; will reach its height probably to-morrow.

Heard what I should call the twitter and mew of a goldfinch [1] and saw the bird go over with ricochet flight. The oak leaves apparently hang on till the buds fairly expand. *Thalictrum anemonoides* by Brister's Spring on hillside. Some skunk-cabbage leaves are now eight or nine inches wide near there. These and the hellebore make far the greatest show of any herbs yet. The peculiarly beautiful clean and tender green of the grass there! Green herbs of all kinds, — tansy, buttercups, etc., etc., etc., now make more or less show. Put this with the grassy season's beginning. Have not observed a tree sparrow for four or five days. The Emerson children found blue and white violets May 1st at Hubbard's Close, probably *Viola ovata* and *blanda;* but I have not been able to find any yet. *Salix alba.*

May 6. P. M. — To epigæa *via* Clamshell Hill. There is no such thing as pure *objective* observation.

[1] Yes, and for several days after.

Your observation, to be interesting, *i. e.* to be significant, must be *subjective*. The sum of what the writer of whatever class has to report is simply some human experience, whether he be poet or philosopher or man of science. The man of most science is the man most alive, whose life is the greatest event. Senses that take cognizance of outward things merely are of no avail. It matters not where or how far you travel, — the farther commonly the worse, — but how much alive you are. If it is possible to conceive of an event outside to humanity, it is not of the slightest significance, though it were the explosion of a planet. Every important worker will report what life there is in him. It makes no odds into what seeming deserts the poet is born. Though all his neighbors pronounce it a Sahara, it will be a paradise to him; for the desert which we see is the result of the barrenness of our experience. No mere willful activity whatever, whether in writing verses or collecting statistics, will produce true poetry or science. If you are really a sick man, it is indeed to be regretted, for you cannot accomplish so much as if you were well. All that a man has to say or do that can possibly concern mankind, is in some shape or other to tell the story of his love, — to sing; and, if he is fortunate and keeps alive, he will be forever in love. This alone is to be alive to the extremities. It is a pity that this divine creature should ever suffer from cold feet; a still greater pity that the coldness so often reaches to his heart. I look over the report of the doings of a scientific association and am surprised that there is so little life to be reported; I am put off with

a parcel of dry technical terms. Anything living is easily and naturally expressed in popular language. I cannot help suspecting that the life of these learned professors has been almost as inhuman and wooden as a rain-gauge or self-registering magnetic machine. They communicate no fact which rises to the temperature of blood-heat. It does n't all amount to one rhyme.

The ducks appear to be gone (though the water is higher than any time since that greatest of all rises, I think, — reached its height yesterday; the arches are quite concealed), swept by with the spring snow and ice and wind, though to-day it has spit a little snow and is *very* windy (northwest) and cold enough for gloves. Is not that the true spring when the *F. hyemalis* and tree sparrows are with us singing in the cold mornings with the song sparrows, and ducks and gulls are about? The *Viola ovata* this end of Clamshell Hill, perhaps a day or two; let it go, then, May 1st; also dandelions, perhaps the first, yesterday. This flower makes a great show, — a sun itself in the grass. How emphatic it is! You cannot but observe it set in the liquid green grass even at a distance. I am surprised that the sight of it does not affect me more, but I look at it as unmoved as if but a day had elapsed since I saw it in the fall. As I remember, the most obvious and startling flowers as yet have been the crowfoot, cowslip, and dandelion, so much of a high color against the russet or green. We do not realize yet so high and brilliant a flower as the red lily or arethusa. Horse-mint is an inch or two high, and it

[is] refreshing to scent it again. The *Equisetum sylvaticum* has just bloomed against Hosmer's gap.

It is the young shoots of the choke-cherry which are the more forward, — those which are not blossom-budded, — and this is the case with most trees and shrubs. These are growing while the older are blossoming. Female flower of sweet-gale how long? At Ministerial Swamp, the anthers of the larch appear now effete. I am surprised to find a larch whose female cones are pure white (not rose or crimson). The bundles of larch leaves are now fairly separating. Meadow saxifrage just out at Second Division. The cowslip now makes a show there, though not elsewhere, and not there as much as it will. There is a large and dense field of a small rush there, already a foot high, whose old and dead tops look like blossoms at a distance. The mayflower is in perfection. It has probably been out more than a week.

Returned over the hill back of J. P. Brown's. Was surprised at the appearance of the flood. Seen now from the same side with the westering sun, it looks like a dark-blue liquid like indigo poured in amid the hills, with great bays making up between them, flooding the causeways and over the channel of each tributary brook, — another Musketaquid making far inland. I see in the distance the light, feathery willow rows [?] on the causeway, stretching across it, the trees just blooming and coming into leaf, and isolated red-topped maples standing far in the midst of the flood. This dark-blue water is the more interesting because it is not a permanent feature in the landscape.

Those white froth lines conform to the direction of the wind and are from four to seven or eight feet apart.

Remembering my voyage of May 1st, and Goodwin and Haynes hunting, you might have passed up and down the river three or four miles and yet not have seen one muskrat, yet they killed six at least. One in stern paddling slowly along, while the other sat with his gun ready cocked and the dog erect in the prow, all eyes constantly scanning the surface amid the button-bushes and willows, for the rats are not easy to distinguish from a bunch of dried grass or a stick. Suddenly one is seen resting on his perch, and crack goes the gun, and over the dog instantly goes to fetch him. These men represent a class which probably always exists, even in the most civilized community, and allies it to the most savage. Goodwin said in the morning that he was laying stone, but it was so muddy on account of the rain that he told Haynes he would like to take a cruise out.

May 7. I have noticed the steel-colored, velvet-like lichen on the stumps of maples especially, also on oaks and hickories. Sometimes, where a maple grove has been cut down some years, every stump will be densely clothed with them.

Our principal rain this spring was April 28th, 29th, and 30th, and again, May 3d and 4th, apparently the settling storm of the season. The great source of freshets far and wide. I observed the swallows yesterday, — barn swallows and some of those white-bellied with grayish-brown backs, — flying close to the surface

of the water near the edge of the flooded meadow. Probably they follow their insect prey.

P. M. — To Cliffs.

The causeways being flooded, I have to think before I set out on my walk how I shall get back across the river.

The earliest flowers might be called May-day flowers, — if indeed the sedge is not too far gone for one then. A white-throated sparrow still (in woods). *Viburnum Lentago* and *nudum* are both leafing, and I believe I can only put the former first because it flowers first. Cress at the Boiling Spring, one flower. As I ascend Cliff Hill, the two leaves of the Solomon's-seal now spot the forest floor, pushed up amid the dry leaves. *Vaccinium Pennsylvanicum* leafing. Flowers, *e. g.* willow and hazel catkins, are self-registering indicators of *fair* weather. I remember how I waited for the hazel catkins to become relaxed and shed their pollen, but they delayed, till at last there came a pleasanter and warmer day and I took off my greatcoat while surveying in the woods, and then, when I went to dinner at noon, hazel catkins in full flower were dangling from the banks by the roadside and yellowed my clothes with their pollen. If man is thankful for the serene and warm day, much more are the flowers.

From the Cliffs I again admire the flood, — the now green hills rising out of it. It is dark-blue, clay, slate, and light-blue, as you stand with regard to the sun. With the sun high on one side it is a dirty or clayey slate; directly in front, covered with silvery sparkles far to the right or north, dark-blue; farther to the southwest,

light-blue. My eyes are attracted to the level line where the water meets the hills now, in time of flood, converting that place into a virgin or temporary shore. There is no strand, — nothing worn; but if it is calm we fancy the water slightly heaped above this line, as when it is poured gently into a goblet. (How in the spring we value any smoothness, gentleness, warmth!) It does not beat, but simply laves the hills (already the peetweet flutters and teeters along it a flight further back), submerging the blossoming flowers which I went to find. I see the sweet-gale deeply buried, and the *V. blanda*, etc., etc., and the *A. calyculata* and the cowslips. I see their deluged faces at the bottom and their wrecked petals afloat. I paddle right over Miles's meadow, where the bottom is covered with cowslips in full bloom; their lustre dimmed, they look up with tearful faces. Little promontories at Lee's Cliff, clothed with young pines, make into the water; yet they are rarely submerged; as if nature or the trees remembered even the highest floods and kept out of their way, avoiding the shore, leaving a certain neutral ground. Early strawberry just out. I found an *Amelanchier Botryapium*, with its tender reddish-green leaves already fluttering in the wind and stipules clothed with white silky hairs, and its blossom so far advanced that I thought it would open to-morrow. But a little farther there was another which did not rise above the rock, but caught all the reflected heat, which to my surprise was fully open; yet a part which did rise above the rock was not open. What indicators of warmth! No thermometer could show it better. The *Amelan-*

chier Botryapium leaves begin now to expand. The juniper branches are now tipped with yellowish and expanding leaf-buds; put it just before the larch. I begin to see cows turned out to pasture. I am inclined to think some of these are coarse, windy days, when I cannot hear any bird.

What are those small ferns under the eaves of the rocks at the Cliffs, their little balls unrolling as they ascend, now three or four inches high? How many plants have these crimson or red stigmas? Maples, hazels, sweet-gale, sweet-fern. High blackberry leafing. The leaves are now off the young oaks and shrub oaks on the plain below the Cliffs, except the white oaks, which leaf later. I noticed it elsewhere, — first May 5th, when — or a day or two before perhaps — they suddenly cast off their winter clothing; and the plain now appears thinly covered with gray stems, but in a short month they will have put on a new green coat. They wear their leaves almost all the year. The partridge and rabbit must do without their shelter now a little while. A ruby-crested wren by the Cliff Brook, — a chubby little bird. Saw its ruby crest and heard its harsh note.[1] The birds I have described as such were the same. Hellebore is the most noticeable herb now. Alders, young maples of all kinds, and ostrya, etc., now beginning to leaf. I observe the phenomena of the seashore by our riverside, now that there

[1] This was the same I have called golden-crowned; and so described by W[ilson], I should say, except that I saw its ruby crest. I did n't see the crest of the golden-crowned, and I did not hear this ruby-c. sing like the former. Have I seen the two?

is quite a sea on it and the meadow, though the waves are but eight inches or a foot high. As on the sea beach, the waves are not equally high and do not break with an equally loud roar on the shore; there is an interval of four or five or half a dozen waves between the larger ones. In the middle of the meadow, where the waves run highest, only the middle and highest parts of the waves are whitened with foam, where they are thinnest and yield to the wind apparently, while their broad bases are detained by union with the water; but next the shore, where their bases are much more detained by friction on the bottom, their tops for their whole length curve over very regularly like a snow-drift, and the water is evenly poured as over a dam and falls with foam and a roar on the water and shore. It is exhilarating to stoop low and look over the rolling waves northwest. The black rolling waves remind me of the backs of waves [*sic*; = whales?]. It is remarkable how cleanly the water deposits its wreck, now spotted with cranberries. There is a bare space of clean grass, perfectly clean and about a foot wide, now left between the utmost edge of the breakers and the steep and abrupt edge of the wreck. So much it has gone down. Thus perfectly the water deposits what floats on it on the land. The oak buds — black, shrub, etc., except white oak — are now conspicuously swollen. A spreading red maple in bloom, seen against a favorable background, as water looking down from a hillside, is a very handsome object, presenting not a dense mass of color but an open, graceful and ethereal top of light crimson or scarlet, not too obvious and staring, slightly

tingeing the landscape as becomes the season, — a veil of rich workmanship and high color against the sky, or water, [or] other trees.

At sunset across the flooded meadow to Nawshawtuct. The water becoming calm. The sun is just disappearing as I reach the hilltop, and the horizon's edge appears with beautiful distinctness. As the twilight approaches or deepens, the mountains, those pillars which point the way to heaven, assume a deeper blue. As yet the aspect of the forest at a distance is not changed from its winter appearance, except where the maple-tops in blossom in low lands tinge it red. And the elm-tops are in fruit in the streets; and is there not [a] general but slight reddish tinge from expanding buds? Scared up ducks of some kind.

May 8. A. M. — To Nawshawtuct.

A female red-wing. I have not seen any before. Hear a yellowbird in the direction of the willows. Its note coarsely represented by *che-che-che-char-char-char*. No *great* flocks of blackbirds on tree-tops now, nor so many of robins. Saw a small hawk flying low, about size of a robin — tail with black bars — probably a sparrow hawk; probably the same I have seen before. Saw one at Boston next day; mine was the pigeon hawk,[1] slaty above (the male) and *coarsely* barred with black on tail. I saw these distinct bars at a distance as mine flew. It appeared hardly larger than a robin. Probably this the only hawk of this size that I

[1] No; for that is barred with white. Could mine have been the *F. fuscus* and so small?

have seen this season. The sparrow hawk is a rather reddish brown and *finely* and thickly barred above with black.[1] Missouri currant. I hear the voices of farmers driving their cows past to their up-country pastures now. The first of any consequence go by now.

P. M. — By boat to Fair Haven.

The water has fallen a foot or more, but I cannot get under the stone bridge, so haul over the road. There is a fair and strong wind with which to sail upstream, and then I can leave my boat, depending on the wind changing to southwest soon. It is long since I have sailed on so broad a tide. How dead would the globe seem, especially at this season, if it were not for these water surfaces! We are slow to realize water, — the beauty and magic of it. It is interestingly strange to us forever. Immortal water, alive even in the superficies, restlessly heaving now and tossing me and my boat, and sparkling with life! I look round with a thrill on this bright fluctuating surface on which no man can walk, whereon is no trace of footstep, unstained as glass. When I got off this end of the Hollowell place I found myself in quite a sea with a smacking wind directly aft. I felt no little exhilaration, mingled with a slight awe, as I drove before this strong wind over the great black-backed waves I judged to be at least twenty inches or two feet high, cutting through them, and heard their surging and felt them toss me. I was even obliged to head across them and not get into their troughs, for then I could

[1] Could the Boston pigeon hawk have been barred with black?

hardly keep my legs. They were crested with a dirty-white foam and were ten or twelve feet from crest to crest. They were so black, — as no sea I have seen, — large and powerful, and made such a roaring around me, that I could not but regard them as gambolling monsters of the deep. They were *melainai* — what is the Greek for waves? This is our black sea. You see a *perfectly black* mass about two feet high and perhaps four or five feet thick and of indefinite length, round-backed, or perhaps forming a sharp ridge with a dirty-white crest, tumbling like a whale unceasingly before you. Only one of the epithets which the poets have applied to the color of the sea will apply to this water, — *melaina*, μέλαινα θάλασσα. I was delighted to find that our usually peaceful river could toss me so. How much more exciting than to be planting potatoes with those men in the field! What a different world! The waves increased in height till [I] reached the bridge, the impulse of wind and waves increasing with the breadth of the sea. It is remarkable that it requires a very wide expanse to produce so great an undulation. The length of this meadow lake in the direction of the wind is about a mile, its breadth varying from a mile to a quarter of a mile, and the great commotion is toward the southerly end. Yet after passing the bridge I was surprised to find an almost smooth expanse as far as I could see, though the waves were about three inches high at fifty rods' distance. I lay awhile in that smooth water, and though I heard the waves lashing the other side of the causeway I could hardly realize what a sea I [had] just sailed through. It

sounded like the breakers on the seashore heard from *terra firma*.

Lee's Cliff is now a perfect natural rockery for flowers. These gray cliffs and scattered rocks, with upright faces below, reflect the heat like a hothouse. The ground is whitened with the little white cymes of the saxifrage, now shot up to six or eight inches, and more flower-like dangling scarlet columbines are seen against the gray rocks, and here and there the earth is spotted with yellow crowfoots and a few early cinquefoils (not to mention houstonias, the now mostly effete sedge, the few *Viola ovata*, — whose deep violet is another kind of *flame*, as the crowfoot is yellow, — hanging their heads low in the sod, and the as yet inconspicuous veronica); while the early *Amelanchier Botryapium* overhangs the rocks and grows in the shelves, with its loose, open-flowered racemes, curving downward, of narrow-petalled white flowers, red on the back and innocently cherry-scented, — as if it had drunk cherry-bounce and you smelled its breath. To which is to be added the scent of bruised catnep and the greenness produced by many other forward herbs, and all resounding with the hum of insects. And all this while flowers are rare elsewhere. It is as if you had taken a step suddenly a month forward, or had entered a greenhouse. The rummy scent of the different cherries is remarkable. The *Veronica serpyllifolia* out, say yesterday. Not observed unless looking for it, like an infant's hood, — its pretty little blue-veined face. *Cerastium viscosum*, apparently today first.

At I returned I saw, in the Miles meadow, on the bottom, two painted tortoises fighting. Their sternums were not particularly depressed. The smaller had got firmly hold of the loose skin of the larger's neck with his jaws, and most of the time his head was held within the other's shell; but, though he thus had the "upper hand," he had the least command of himself and was on his edge. They were very moderate, — for the most part quite still, as if weary, — and were not to be scared by me. Then they struggled a little, their flippers merely paddling the water, and I could hear the edges of their shells strike together. I took them out into the boat, holding by the smaller, which did not let go of the larger, and so raising both together. Nor did he let go when they were laid in the boat. But when I put them into the water again they instantly separated and concealed themselves.

The hornbeam has lost its leaves; in this respect put it before the white oak and, for [the] present, after the other oaks, judging from buds. Fever-bush well out now.

May 9. *Tuesday.* To Boston and Cambridge.

Currant in garden, but ours may be a late kind. Purple finch still here.

Looking at the birds at the Natural History Rooms, I find that I have not seen the crow blackbird at all yet this season. Perhaps I have seen the rusty-blackbird, though I am not sure what those slaty-black ones are, as large as the red-wings, nor those pure-black fellows, unless rusty blackbirds. I think that my black-

birds of the morning of the 24th may have been cowbirds.

Sat on end of Long Wharf. Was surprised to observe that so many of the men on board the shipping were pure countrymen in dress and habits, and the seaport is no more than a country town to which they come a-trading. I found about the wharves, steering the coasters and unloading the ships, men in farmer's dress. As I watched the various craft successively unfurling their sails and getting to sea, I felt more than for many years inclined to let the wind blow me also to other climes.

Harris showed me a list of plants in *Hovey's Magazine* (I think for '42 or '43) not in Bigelow's Botany, — seventeen or eighteen of them, among the rest a pine I have not seen, etc., etc., *q. v.* That early narrow curved-winged insect on ice and river which I thought an ephemera he says is a *Sialis*, or maybe rather a *Perla*. Thinks it the *Donatia palmata* I gave him. Says the shad-flies (with streamers and erect wings) are ephemeræ. He spoke of *Podura nivalis*, I think meaning ours.

Planted melons.

May 10. Now in the mornings I hear the chip-bird under my windows at and before sunrise. Warbling vireo on the elms. The chimney swallow. A peach out in yard, where it had been covered by the snow. The cultivated cherry in bloom.

8 A. M. — To Tall's Island, taking boat at Cliffs.

Had some rain about daylight, which I think makes

the weather uncertain for the day. Damp, April-like mistiness in the air. I take an umbrella with me. The *Salix alba* — and also one or two small native ones by river of similar habits — their catkins together with their leaves make the greatest show now of any trees (which are indigenous or have fairly established themselves), though a *very few* scattered *young* trembles suddenly streak the hillsides with their tender green in some places; and perhaps *young* balm-of-Gileads show in some places;[1] but with the willows it is general and from their size and being massed together they are seen afar. The *S. alba*, partly, indeed, from its commonness and growing together, is the first of *field* trees whose growth makes an impression on the careless and distant observer, — a tender yellowish green. (The mountain-ash, horse-chestnut, and perhaps some other cultivated trees, indeed, if we regard them separately and their leaves alone, which are much larger, are now ahead of the willows.) The birches of all kinds with catkins begin to show a light green.

The inquisitive *yorrick* of the Wilson's thrush, though I hear no veery note. This at entrance of Deep Cut. The oven-bird, and note loud and unmistakable, making the hollow woods ring. This is decidedly smaller than what I have taken to be the hermit thrush. The black and white creeper, unmistakable from its creeping habit. It holds up its head to sing sharp and fine *te che, te che, te che, te che, te che, te che, te chē*. The oven-bird's note is much louder, broader, and more swinging. The latter sits on a low twig quite within

[1] Not important here; rather with birches.

the wood. Yesterday was a quite warm day, and these new birds I hear directly after it.

Vaccinium Pennsylvanicum first put out, and I see a humblebee about some others which are not open, knocking at their doors, which, if open, would be too small for him to enter. *Viola pedata* already numerous — say yesterday without doubt — at Lupine Knoll, paler than the *ovata*, — their pale faces. The field sparrow resembles a more slender tree sparrow without the spot on breast, with a light-colored bill and legs and feet, ashy-white breast, and beneath eye a drab, callow look. Note, *phe phe phe phe phe phe, phe phe-e-e-e-e;* holds up its head the while. Thorns are leafing. *Viola blanda* by Corner road at brook and below Cliff Hill Spring. Canoe birch and white ditto leafing. There is a dew or rather rain drop in the centre of the sun-dial (lupine) leaf, where its seven or eight leafets meet, over the sand. Cornel (*sericea*) leafing along river. I hear the fine, wiry mew of the song sparrow. A catbird mewing.

Saw coupled on a hillock by the water two what I should have called black snakes, — a uniform very dark brown, the male much the smallest. The under side — what little I noticed of the rear of the latter — was a bluish slate; but, when they ran into *the water*, I observed dull-yellowish transverse bars on the back of the female (did not observe the other there), and, when I turned over the male, had a glimpse of a reddish or orange belly. Were they water adders or black snakes? The largest was perhaps between three and four feet.

If that is the leaf of the arrow-wood which looks

so much like a cornel, it will rank next to the *Viburnum nudum*. *Vide* plant by bridge.

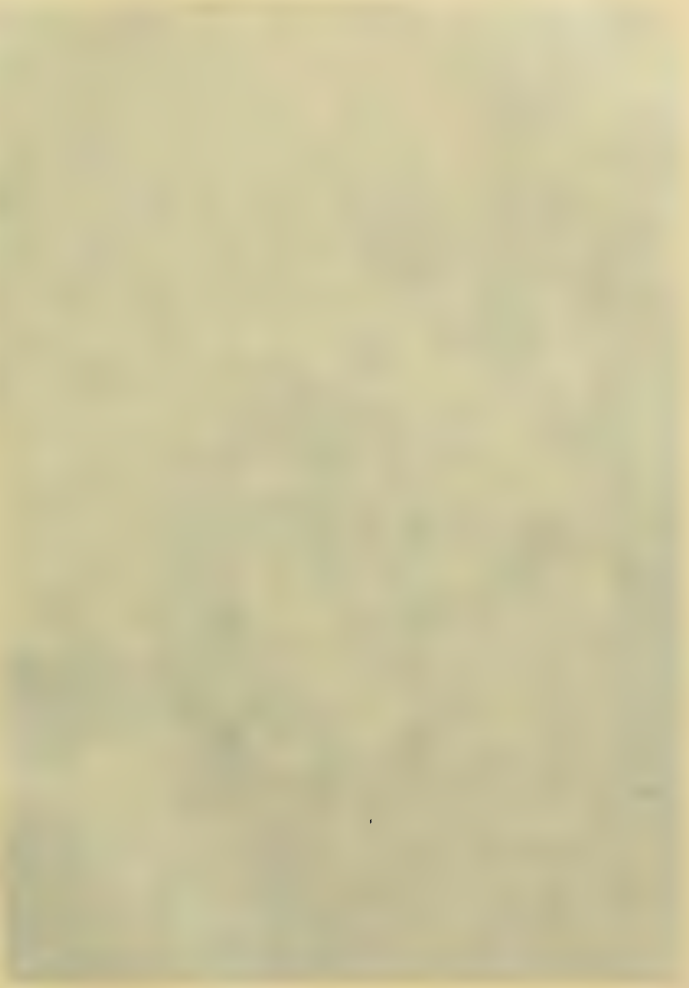
In Boston yesterday an ornithologist said significantly, "If you held the bird in your hand —;" but I would rather hold it in my affections.

The wind is southwest, and I have to row or paddle up. The shad-bush in blossom is the first to show like a fruit tree, — like a pale peach, — on the hillsides, seen afar amid gray twigs, amid leafless shrub oaks, etc., before even its own leaves are much expanded. I dragged and pushed my boat over the road at Deacon Farrar's brook, carrying a roller with me. It is warm rowing with a thick coat. Heard the first regular bullfrog trump, not *very* loud, however, at the swamp white oaks southwest of Pantry. Heard the night-warbler. Saw three ducks on Sudbury meadows still, one partly white, the others all dusky, — probably black ducks. As to the first, with a large dark head and white breast and sides, I am not sure whether it was a golden-eye, or whistler.

Dined at Tall's Island. The tupelo terminates abruptly, as if mutilated at top, and the slender, straggling branches decline thence downward, often longer than the tree is high. The shores of these meadows do not invite me to land on them; they are too low. A lake requires some high land close to it. Meeting-House Hill is the most accessible hereabouts. Anemones common now; they love to grow under brush or tree-tops which the choppers have left. Shad leaves develop fast. Pitch pines started for two or three days in some places, the largest shoots now four inches.

Returning stopped at Rice's. He was feeding his chickens with Indian meal and water. While talking with him heard bobolinks. I had seen what looked like a great stake just sticking out above the surface of the water on the meadows and again covered as if it were fastened at one end. It finally disappeared and probably was a large mud turtle. Rice told me that he had hunted them. You go a little later in this month, — a calm forenoon when the water is smooth, — and "the wind must be south," — and see them on the surface. Deacon Farrar's meadow in time of flood (I had come through this) was a good place.

It began to sprinkle, and Rice said he had got "to bush that field" of grain before it rained, and I made haste back with a fair wind and umbrella for sail. Were those cowbirds in Miles's meadow, about or near the cow? Alders generally have fairly begun to leaf. I came on rapidly in a sprinkling rain, which ceased when I reached Bittern Cliff, and the water smoothed somewhat. I saw many red maple blossoms on the surface. Their keys now droop gracefully about the stems. A fresh, growing scent comes from the moistened earth and vegetation, and I perceive the sweetness of the willows on the causeway. Above the railroad bridge I saw a kingfisher twice sustain himself in one place, about forty feet above the meadow, by a rapid motion of his wings, somewhat like a devil's-needle, not progressing an inch, apparently over a fish. Heard a tree-toad.



Shad-bush in Blossom

May 11. 6 A. M. — To Laurel Hillside by Walden.

Earliest gooseberry in garden open. Heard a Maryland yellow-throat about alders at Trillium Woods, where I first heard one last year, but it finds the alders cut down in the winter. Yellow birch apparently open, its leaf as forward as the *blossom* (*comparatively* — with other birches). Many small swallows hovering over Deep Cut, — probably bank swallows (?). Hear the golden robin. It is wonderful how surely these distinguished travellers arrive when the season has sufficiently revolved. *Prunus Americana*, Canada plum, yesterday at least, at Mr. Brooks's. A common plum to-day.

To sum up leafing of trees, etc., since May 5th, add these: —

Creeping juniper.
Larch; bundles fairly separated on some trees May 6th; open slowly.
Early blueberry.
Amelanchier Botryapium. It came forward fast.
High blackberry.
Young rock maple.
" red "
" white (?) [maple].
Alders generally.
Ostrya.
Some trembles suddenly leafed.
Balm-of-Gileads.
Some thorns.
Yellow birch.
Canoe "
White "
Canada plum, I think here.
Pitch pine; some shoots now four inches long.
Norway [pine]?
Cornus sericea.

P. M. — To Saw Mill Brook.

White pines have started; put them with pitch. Nepeta just out. I am in a little doubt about the wrens (I do not refer to the snuff-colored one), whether I have seen more than one. All that makes me doubt is that I saw a ruby, or perhaps it might be called fiery, crest on the last — not golden.

Amelanchier oblongifolia, say yesterday, probably the one whose fruit I gathered last year. It does not leaf till it flowers. Sweet-gale has just begun to leaf. The willows on the Turnpike now resound with the hum of bees, and I hear the yellowbird and Maryland yellow-throat amid them. These *yellow* birds are concealed by the yellow of the willows. The cornels generally have fairly started, excepting the *C. florida* (have not noticed the bunch-berry and round-leaved), and for aught I have seen yet may be placed in the order of their flowering, — alternate, panicled, sericea, putting all on the day of the sericea, *i. e.* yesterday. Wild red cherry in road near Everett's open.

The most forward oak *leafets* are, I think, in one place a red, say just started, but I see shrub oak and swamp white catkins in a few places an inch long. Some shrub oak flower-buds are yellowish, some reddish. The *Thalictrum anemonoides* is a perfect and regular white star, but methinks lacks the interesting red tinge of the other. Some young chestnuts have begun — the lower branches — and are earlier than any oaks. White birches are suddenly leafing in some places, so as to make an open veil or gauze of green against the other trees. Young hornbeams

just before cornels; the old ones just begun to leaf. Various slender ferns, without wool, springing apparently at Saw Mill Brook; some quite dark; also brake a foot high. The arrow-wood has just begun. The *young* black birch leafing with others.

While at the Falls, I feel the air cooled and hear the muttering of distant thunder in the northwest and see a dark cloud in that direction indistinctly through the wood. That distant thunder-shower very much cools our atmosphere. And I make haste through the woods homeward *via* Hubbard's Close. Hear the evergreen-forest note. The true poet will ever live aloof from society, wild to it, as the finest singer is the wood thrush, a forest bird. The shower is apparently going by on the north. There is a low, dark, blue-black arch, crescent-like, in the horizon, sweeping the distant earth there with a dusky, rainy brush, and all men, like the earth, seem to wear an aspect of expectation. There is an uncommon stillness here, disturbed only by a rush of the wind from time to time. In the village I meet men making haste to their homes, for, though the heavy cloud has gone quite by, the shower will probably strike us with its tail. Rock maple keys, etc., now two inches long, probably been out some days. Those by the path on Common not out at all. Now I have got home there is at last a still cooler wind with a rush, and at last a smart shower, slanting to the ground, without thunder.

My errand this afternoon was chiefly to look at the gooseberry at Saw Mill Brook. We have two kinds in garden, the earliest of same date to leaf with that

in the swamp, but very thorny, and one later just open. The last is apparently the same with that by Everett's, also just open, and with that this side of E. Wood's. I also know one other, *i. e.* the one at Saw Mill Brook, plainly distinct, with long petioled and glossy heart-shaped leaves, but as yet I find no flowers. I will call this for the present the swamp gooseberry.[1] *Stellaria media*, apparently not long. Butternut beginning to leaf.

Over meadows in boat at sunset to Island, etc.

The rain is over. There is a bow in the east. The earth is refreshed; the grass is wet. The air is warm again and still. The rain has smoothed the water to a glassy smoothness. It is very beautiful on the water now, the breadth of the flood not yet essentially diminished. The ostrya will apparently shed its pollen to-morrow. High blueberry is just leafing. I see the kingbird. It is remarkable that the radical leaves of goldenrod should be already so obvious, *e. g.* the broad-leaved at Saw Mill Brook. What need of this haste? Now at last I see crow blackbirds without doubt. They have probably been here before, for they are put down under April in the bird book (for '37). They fly as if carrying or dragging their precious long tails, broad at the end, through the air. Their note is like a great rusty spring, and also a hoarse chuck. On the whole I think they must have been rusty grackles which I mistook for this bird, and I think I saw their

[1] May 27th, the green shoots are covered with bristly prickles, but I can find no flowers. Is it the same with that by maple swamp in Hubbard's Close with young fruit?

silvery irides; look like red-wings without the red spot. Ground-ivy *just* begins to leaf. I am surprised to find the great poplar at the Island conspicuously in leaf, — leaves more than an inch broad, from top to bottom of the tree, and are already fluttering in the wind, — and others near it — conspicuously before any other native tree, as tenderly green, wet, and glossy as if this shower had opened them. The full-grown white maples are as forward in leafing now as the young red and sugar ones are now, only their leaves are smaller than the last. Put the young, at a venture, after the low blackberry, the old just before the other maples. The balm-of-Gilead is rapidly expanding, and I scent it in the twilight twenty rods off.

The earliest of our indigenous trees, then, to leaf *conspicuously* is the early tremble. (The one or more willows which leaf when they flower, like the *Salix alba*, with their small leaves, are *shrubs*, hardly trees.) Next to it, — close upon it, — *some* white birches, and, apparently close upon this, the balm-of-Gilead and white maple. Two days, however, *may* include them all. The wild red cherry and black cherry, though earlier to begin, are not now conspicuous, but I am not sure that some of the other birches, where young in favorable places, may not be as forward as the white.[1] But the *S. alba*, etc., precede them all. It is surprising what an electrifying effect this shower appears to have had. It is like the christening of the summer, and I

[1] Probably not, to any extent. *Vide* P. M. of 17th *inst.* *Vide* list [p. 297].

suspect that summer weather may be always ushered in in a similar manner, — thunder-shower, rainbow, smooth water, and warm night. A rainbow on the brow of summer. Nature has placed this gem on the brow of her daughter. Not only the wet grass looks many shades greener in the twilight, but the old pine-needles also. The toads are heard to ring more generally and louder than before, and the bullfrogs trump regularly, though not very loudly, reminding us that they are at hand and not drowned out by the freshet. All creatures are more awake than ever. Now, some time after sunset, the robins scold and sing (but their great singing time is earlier in the season), and the Maryland yellow-throat is heard amid the alders and willows by the waterside, and the peetweet and blackbirds, and sometimes a kingbird, and the tree-toad somewhat.

Sweet-briar just beginning to leaf generally (?).

May 12. 5.30 A. M. — To Nawshawtuct.

Quite a fog risen up from the river. I cannot see over it from the hill at 6 A. M. The first I have seen. The grass is now high enough to be wet. I see many perfectly geometrical cobwebs on the trees, with from twenty-six to thirty-odd rays, six inches to eighteen in diameter, but no spiders. I suspect they were spun this last warm night very generally. No insects in them yet. They are the more conspicuous for being thickly strewn with minute drops of the mist or dew, like a chain of beads. Are they not meteorologists? A robin's nest in an apple tree with three eggs, — first nest I have

seen, — also a red-wing's nest — bird about it did not look in — before the river is low enough for them to build on its brink. *Viola cucullata* apparently to-day first, near the sassafrases. A small white birch catkin. Fir balsam just begins fairly to loosen bundles. Were they blue-winged teal flew by? for there was a large white spot on the sides aft. I think I scared up the same last night. Fever-root up four or five inches.

Is not this the first day of summer, when first I sit with the window open and forget fire? and hear the golden robin and kingbird, etc., etc.? not to mention the bobolink, vireo, yellowbird, etc., and the trump of bullfrogs heard last evening.

P. M. — To climbing fern.

I have seen a little blue moth a long time. My thick sack is too much yesterday and to-day. The golden robin makes me think of a thinner coat. I see that the great thrush, — brown thrasher, — from its markings, is still of the same family with the wood thrush, etc. These genera are very curious. A shrub or bear oak beginning to leaf. Am struck with the fact that the Assabet has relieved itself of its extra waters to a much greater extent than the main branch. Woolly aphides on alder. Large black birches, not quite leafing nor in bloom. In one bunch of *Viola ovata* in Ministerial Swamp Path counted eleven, an unusual number. What are those handsome conical crimson-red buds not burst on the white [*sic*] spruce? The leaves of the larch begin to make a show. Mosquito. The climbing fern is evergreen — only the flowering top dies — and

spreads by horizontal roots. I perceive no growth yet. The *Amelanchier oblongifolia* has denser and smaller racemes, more erect (?), broader petalled, and not tinged with red on the back. Its downy leaves are now less conspicuous and interesting than the other's. On the whole it is not so interesting a variety.

The bear-berry is well out, perhaps a quarter part of them. May 6th, I thought it would open in a day or two; say, then, the 8th.

At last I hear the veery strain. Why not as soon as the *yorrick?* Heard again the evergreen-forest note. It is a slender bird, about size of white-eyed vireo, with a black throat and I think some yellow above, with dark and light beneath, in the tops of pines and oaks. The only warblers at all like it are black-throated green, black-throated blue, black-poll, and golden-winged, and maybe orange-crowned.

May 13. The portion of the peach trees in bloom in our garden shows the height of the snow-drifts in the winter.

4 P. M. — To V. Muhlenbergii Brook.

The bass suddenly expanding its little round leaves; probably began about the 11th. Uvularias, amid the dry tree-tops near the azaleas, apparently yesterday. Saw the crow blackbird fly over, turning his tail in the wind into a vertical position to serve for a rudder, then sailing with it horizontal. The great red maples begin to leaf, and the young leafets of the red (?) oaks up the Assabet on Hosmer's land, and one at Rock, now begin to be conspicuous. Waxwork begins to leaf.

The sand cherry, judging from what I saw yesterday, will begin to flower to-day.

As for the birds, I have not for some time noticed crows in flocks. The voices of the early spring birds are silenced or drowned in multitude of sounds. The black ducks are probably all gone. Are the rusty grackles still here? Birds generally are now building and sitting. Methinks I heard one snipe night before last? I have not noticed the pine warbler nor the myrtle-bird for a fortnight. The chip-sparrow is lively in the morning. I suspect the purple finches are all gone within a few days. The black and white creeper is musical nowadays, and thrushes and the catbird, etc., etc. Goldfinch heard pretty often.

Insects have just begun to be troublesome.

Young *Populus grandidentata* just opening. Panicled andromeda leaf to-morrow; not for three or four days generally.

May 14. P. M. — To Hill by boat.

A St. Domingo cuckoo, black-billed with red round eye, a silent, long, slender, graceful bird, dark cinnamon (?) above, pure white beneath. It is in a leisurely manner picking the young caterpillars out of a nest (now about a third of an inch long) with its long, curved bill. Not timid. Black willows have begun to leaf, — if they are such in front of Monroe's. White ash and common elm *began* to leaf yesterday, if I have not named the elm before. The former will apparently open to-morrow. The black ash, *i. e.* that by the river, may have been open a day or two. Apple in bloom.

Swamp white oak perhaps will open to-morrow.[1] Celtis has begun to leaf. I think I may say that the white oak leaves have now fallen; saw but one or two small trees with them day before yesterday.

Sumach began to leaf, say yesterday. Pear opened, say the 12th. The leafing goes on now rapidly, these warm and moist showery days.

May 15. Judging from those in garden, the witch-hazel began to leaf yesterday, black alder to-day.

P. M. — Up Assabet.

The golden willow catkins are suddenly falling and cover my boat. High blueberry has flowered, say yesterday. Swamp-pink leafing, say yesterday. The *Amelanchier Botryapium* — some of them — have lost blossoms and show *minute* fruit. This I suspect the first *sign* of all wild edible fruit. *Cornus florida* began to leaf, say yesterday. The round-leafed cornel (at Island) is, I [think], as early as any of the cornels to leaf; put it for the present with the *alternifolia*. Gaylussacia begins to leaf to-day and is sticky. *Polygonatum pubescens* will apparently blossom to-morrow. Hickories make a show suddenly; their buds are so large, say yesterday. Young white oaks also yesterday. Old ones hardly to-day, but their catkins quite prominent. Young white oak (and black oak) leafets now very handsome, red on under side. Black oaks appear to have begun to leaf about the 13th, immediately after the red. The large *P. grandidentata* by river not leafing yet.

[1] No, no.

Looked off from hilltop. Trees generally are now bursting into leaf. The aspect of oak and other woods at a distance is somewhat like that of a very thick and reddish or yellowish mist about the evergreens. In other directions, the light, graceful, and more distinct yellowish-green forms of birches are seen, and, in swamps, the reddish or reddish-brown crescents of the red maple tops, now covered with keys. Oak leaves are as big as a mouse's ear, and the farmers are busily planting. It is suddenly very warm and looks as if there might be a thunder-shower coming up from the west. The crow blackbird is distinguished by that harsh, springlike note. For the rest, there is a sort of split whistle, like a poor imitation of the red-wing. A yellow butterfly.

Have just been looking at Nuttall's "North American Sylva." Much research, fine plates and print and paper, and unobjectionable periods, but no turpentine, or balsam, or quercitron, or salicin, or birch wine, or the aroma of the balm-of-Gilead, no gallic, or ulmic, or even malic acid. The plates are greener and higher-colored than the words, etc., etc. It is sapless, if not leafless.

May 16. *Tuesday.* Saw an arum almost open the 11th; say 16th (?), though not shedding pollen 16th at Conantum. Sugar maples, large, beginning to leaf, say 14th; also mulberry in the How garden to-day; locust the 14th; white [*sic*] spruce, the earliest to-day; buttonwood the 14th (*leafing* all).

P. M. — To Conantum by boat with S.

V. peregrina in Channing's garden, — purslane speedwell, — *some* flowers withered; some days at least. Observed all the oaks I know except the chestnut and dwarf chestnut and scarlet (?). I see anthers perhaps to all, but not yet any pollen. Apparently the most forward in respect to blossoming will be the shrub oak, which possibly is now in bloom in some places, then apparently swamp white, then red and black, then white. White oak apparently leafs with swamp white, or say next day.[1] Red and black oaks leaf about together, before swamp white and white. Earliest sassafras opened yesterday; leafs to-day. Butternut will blossom to-morrow. The great fern by sassafras begins to bloom, probably *Osmunda Claytoniana*, two feet high now, — interrupted fern, — its very dark heads soon surmounted with green. Lambkill beginning to leaf. Green-briar leaf yesterday. The rich crimson leaf-buds of the grape, yesterday globular (and some to-day), are rapidly unfolding, scattered along the vine; and the various leaves unfolding are flower-like, and taken together are more interesting than any flower. Is that a hop[2] by the path at landing on hill with shoots now five or six inches long? Pads begin to appear and spread themselves out on the surface here and there, as the water goes down, — though it is still over the meadows, — with often a scalloped edge like those tin platters on which country people sometimes bake turnovers. Their round green buds here and there look like the

[1] See forward.

[2] Probably clematis, — one of the earlier plants, then.

heads of tortoises; and I saw in the course of the afternoon three or four just begun to blossom. Golden robin building her nest. It is easy to see now that the highest part of the meadow is next the river. There is generally a difference of a foot at least. Saw around a hardhack stem on the meadow, where the water was about two feet deep, a light-brown globular mass, two inches or more in diameter, which looked like a thistle-head full of some kind of seeds, some of which were separated from it by the agitation made by the boat but returned to it again. I then saw that they were living creatures. It was a mass of gelatinous spawn filled with little light-colored pollywogs (?), or *possibly* fishes (?), all head and tail,—a long, broad light-colored and thin tail, which was vertical, appended to a head with two eyes. These were about a quarter of an inch long, and when washed off in the water wiggled back to the mass again.

Quite warm; cows already stand in water in the shade of the bridge. I stopped to get some water at the springy bank just above the railroad. I dug a little hollow with my hands so that I could dip some up with a skunk-cabbage leaf, and, while waiting for it to settle, I thought, by a squirming and wriggling movement on the bottom, that the sand was all alive with some kind of worms or insects. There were in fact some worm-skins (?) on it. Looking closer, however, I found that this motion and appearance was produced by the bursting up of the water, which not only trickled down from the bank above but burst up from beneath. The sandy bottom was speckled

with hundreds of small, regularly formed orifices, like those in a pepper-box, about which the particles of sand kept in motion had made me mistake it for squirming worms. There was considerable loam or soil mixed with the sand. These orifices, separated by slight intervals like those in the nose of a water-pot, gave to the spring an unexpectedly regular appearance. It is surprising how quickly one of these springs will run clear. Also drank at what I will call Alder Spring at Clamshell Hill.

Looked into several red-wing blackbirds' nests which are now being built, but no eggs yet. They are generally hung between two twigs, say of button-bush. I noticed at one nest what looked like a tow string securely tied about a twig at each end about six inches apart, left loose in the middle. It was not a string, but I think a strip of milkweed pod, etc., — water asclepias probably, — maybe a foot long and very strong. How remarkable that this bird should have found out the strength of this, which I was so slow to find out!

The leaf-buds at last suddenly burst. It is now very difficult to compare one with another or keep the run of them. The bursting into leaf of the greater number, *including the latest*, is accomplished within a week, say from the 13th of May this year to probably the 20th; that is, within these dates they acquire minute leafets. This same is the principal planting week methinks. The clethra well leafed, say with the bass (?). *Andromeda calyculata*, leaf to-morrow.

The red or crimsoned young leaves of the black and red (?) oaks, — the former like red damask, — and

the maroon(?)-red inclining to flesh-color — salmon-red (?) — of the white oak, all arranged now like little parasols, — in white oak five leafets, — are as interesting and beautiful as flowers, downy and velvet-like. Sorrel well out in some warm places. *Ranunculus bulbosus* will flower to-morrow, under Clamshell. Yesterday, when the blossoms of the golden willow began to fall, the blossoms of the apple began to open.

Landed at Conantum by the red cherry grove above Arrowhead Field. The red cherries six inches in diameter and twenty-five or thirty [feet] high, in full bloom, with a reddish smooth bark. It is a splendid day, so clear and bright and fresh; the warmth of the air and the bright tender verdure putting forth on all sides make an impression of luxuriance and genialness, so perfectly fresh and uncankered. A sweet scent fills the air from the expanding leafets or some other source. The earth is all fragrant as one flower. And bobolinks tinkle in the air. Nature now is perfectly genial to man. I noticed the dark shadow of Conantum Cliff from the water. Why do I notice it at this season particularly? Is it because a shadow is more grateful to the sight now that warm weather has come? Or is there anything in the contrast between the rich green of the grass and the cool dark shade? As we walked along to the C. Cliff, I saw many *Potentilla Canadensis* var. *pumila* now spotting the ground. *Vaccinium vacillans* just out. *Arenaria serpyllifolia* to-morrow. *Myosotis stricta* in several places; how long? Trillium out, possibly yesterday. Maidenhair ferns some up

and some starting, unclenching their little red fists. Fever-bush, say leafed about the 12th.

Returning, the water is smoother than common, — quite glassy in some places. It is getting to be difficult to cross the meadows. Float close under the edge of the wood. But the wind changes to east and blows agreeably fresh. How fair and elysian these rounded and now green Indian hills, with their cool dark shadows on the east side! There are great summer clouds in the sky, — blocked rhomboidal masses tier above tier, white, glowing above, darker beneath.

On Hubbard's meadow, saw a motion in the water as if a pickerel had darted away; approached and saw a middle-sized snapping turtle on the bottom; managed at last, after stripping off my coat and rolling up my shirt-sleeve, by thrusting in my arm to the shoulder, to get him by the tail and lift him aboard. He tried to get under the boat. He snapped at my shoe and got the toe in his mouth. His back was covered with green moss (?), or the like, mostly concealing the scales. In this were small leeches. Great, rough, but not hard, scales on his legs. He made a pretty loud hissing like a cross dog, by his breathing. It was wonderful how suddenly this sluggish creature would snap at anything. As he lay under the seat, I scratched his back, and, filling himself with air and rage, his head would suddenly fly upward, his shell striking the seat, just as a steel trap goes off, and though I was prepared for it, it never failed to startle me, it was so swift and sudden. He slowly inflated himself, and then suddenly went off like a percussion

lock snapping the air. Thus undoubtedly he catches fishes, as a toad catches flies. His laminated tail and great triangular points in the rear edge of his shell. Nature does not forget beauty of outline even in a mud turtle's shell.

Rhodora well out, probably two days, and leaf as long, or yesterday. The stinkpots have climbed two or three feet up the willows and hang there. I suspect that they appear first about the same time with the snapping turtles. Far and near I see painted turtles sunning or tumbling off the little hummocks laid bare by the descending water, their shells shining in the sun.

May 17. 5.30 A. M. — To Island.

The water is now tepid in the morning to the hands (may have been a day or two), as I slip my hands down the paddle. Hear the wood pewee, the warm-weather sound. As I was returning over the meadow this side of the Island, I saw the snout of a mud turtle above the surface, — little more than an inch of the point, — and paddled toward it. Then, as he moved slowly on the surface, different parts of his shell and head just appearing looked just like the scalloped edges of some pads which had just reached the surface. I pushed up and found a large snapping turtle on the bottom. He appeared of a dirty brown there, very nearly the color of the bottom at present. With his great head, as big as an infant's, and his vigilant eyes as he paddled about on the bottom in his attempts to escape, he looked not merely repulsive, but to some extent terrible even as a crocodile. At length, after

thrusting my arm in up to the shoulder two or three times, I succeeded in getting him into the boat, where I secured him with a lever under a seat. I could get him from the landing to the house only by turning him over and drawing him by the tail, the hard crests of which afforded a good hold; for he was so heavy that I could not hold him off so far as to prevent his snapping at my legs. He weighed thirty and a half pounds.

Extreme length of shell	15½ inches
Length of shell in middle	15 "
Greatest width of shell	12½ "
(This was toward the rear.)	
Tail (beyond shell)	11½ "

His head and neck it was not easy to measure, but, judging from the proportions of one described by Storer, they must have been 10 inches long at least, which makes the whole length 37 inches. Width of head 4½ inches; with the skin of the neck, more than 5. His sternum, which was slightly depressed, was 10½ by 5½. Depth from back to sternum about 7 inches. There were six great scallops, or rather triangular points, on the hind edge of his shell, three on each side, the middle one of each three the longest, about ¾ of an inch. He had surprisingly stout hooked jaws, of a gray color or bluish-gray, the upper shutting over the under, a more or less sharp triangular beak corresponding to one below; and his flippers were armed with very stout claws 1¼ inches long. He had a very ugly and spiteful face (with a vigilant gray eye, which was never shut in any position of the head), surrounded by the thick and ample

folds of the skin about his neck. His shell was comparatively smooth and free from moss, — a dirty black. He was a *dirty* or speckled white beneath. He made the most remarkable and awkward appearance when walking. The edge of his shell was lifted about eight inches from the ground, tilting now to this side, then to that, his great scaly legs or flippers hanging with flesh and loose skin, — slowly and gravely (?) hissing the while. His walking was perfectly elephantine. Thus he stalked along, — a low conical mountain, — dragging his tail, with his head turned upward with the ugliest and most venomous look, on his flippers, half leg half fin. But he did not proceed far before he sank down to rest. If he could support a world on his back when lying down, he certainly could not stand up under it. All said that he walked like an elephant. When lying on his back, showing his *dirty* white and warty under side, with his tail curved round, he reminded you forcibly of pictures of the dragon. He could not easily turn himself back; tried many times in vain, resting betweenwhiles. Would inflate himself and convulsively spring with head and all upward, so as to lift his shell from the ground, and he would strike his head on the ground, lift up his shell, and catch at the earth with his claws. His back was of two great blunt ridges with a hollow between, down the middle of which was a slight but distinct ridge also. There was also a ridge of spines more or less hard on each side of his crested tail. Some of these spines in the crest of the tail were nearly half an inch high. Storer says that they have five *claws*

on the fore legs, but only four on the hind ones. In this there was a *perfectly* distinct fifth *toe* (?) on the hind legs, though it did not pierce the skin; and on the fore legs it did not much more. S. does not say how many toes he has. These claws must be powerful to dig with.

This, then, is the season for hunting them, now that the water is warmer, before the pads are common, and the water is getting shallow on the meadows. E. Wood, Senior, speaks of two seen fighting for a long time in the river in front of his house last year. I have heard of one being found in the meadow in the winter surrounded by frozen mud. Is not this the heaviest animal found wild in this township? Certainly none but the otter approaches it. Farrar says that, when he was eleven, one which he could not lift into the boat towed him across the river; weighed twenty-nine.

Lilac is out and horse-chestnut. The female flowers — crimson cones — of the white [*sic*] spruce, but not yet the staminate.

The turtle was very sluggish, though capable of putting forth great strength. He would just squeeze into a flour barrel and would not quite lie flat in it when his head and tail were drawn in. There was [a] triangular place in the bottom of his mouth and an

orifice within it through which, apparently, he breathed, the orifice opening and shutting. I hear of a man who injured his back seriously for many years by carrying one some distance at arm's length to prevent his biting him. They are frequently seen fighting and their shells heard striking together.

P. M. — To Cedar Swamp *via* Assabet.

The tupelo began to leaf apparently yesterday. The large green keys of the white maples are now conspicuous, looking like the wings of insects. *Azalea nudiflora* in woods begins to leaf now, later than the white kind. *Viola Muhlenbergii* out, say yesterday. It is a pale violet. Judging from the aspect of the *Lentago* yesterday, I should put its leafing decidedly before *Viburnum nudum*. Also apparently the late rose soon after the one observed, and the moss about same time with first. The swamp white and white oak are slow to leaf. Large maples, too, are not rapid; but the birches, aspens, and balm-of-Gileads burst out suddenly into leaf and make a great show. Also the *young* sugar maples in the street now and for some days have made a show of broad luxuriant leaves, early and rapidly. In the case of the early aspen you could almost see the leaves expand and acquire a darker green — this to be said the 12th or 13th or 14th — under the influence of the sun and genial atmosphere. Now they are only as big as a ninepence, to-morrow or sooner they are as big as a pistareen, and the next day they are as big as a dollar. So too the green veils or screens of the birches rapidly thickened. This from its far greater prevalence than the aspens, balm-of-Gilead, white maples, etc., is the first to give the woodlands anywhere generally a (fresh) green aspect. It is the first to clothe large tracts of deciduous woodlands with green, and perchance it marks an epoch in the season, the *transition* decidedly and generally from bare twigs to leaves. When the birches have put on their green sacks, then

a new season has come. The light reflected from their tender yellowish green is like sunlight.

The turtle's snapping impressed me as something mechanical, like a spring, as if there were no volition about [it]. Its very suddenness seemed too great for a conscious movement. Perhaps in these cold-blooded and sluggish animals there is a near approach to the purely material and mechanical. Their very tenacity of life seems to be owing to their insensibility or small amount of life, — indeed, to be an irritation of the muscles. One man tells me of a turtle's head which, the day after it was cut off, snapped at a dog's tail and made him run off yelping, and I have witnessed something similar myself. I can think of nothing but a merely animated jaw, as it were a piece of mechanism. There is in this creature a tremendous development of the jaw, and, long after the head is cut off, this snaps vigorously when irritated, like a piece of mechanism. A naturalist tells me that he dissected one and laid its heart aside, and he found it beating or palpitating the next morning. They are sometimes baited with eels and caught with a hook. Apparently the best time to hunt them is in the morning when the water is smooth.

There is a surprising change since I last passed up the Assabet; the fields are now clothed with so dark and rich a green, and the wooded shore is all lit up with the tender, bright green of birches fluttering in the wind and shining in the light, and red maple keys are seen at a distance against the tender green of birches and other trees, tingeing them.

The wind is easterly, having changed, and produces

an agreeable raw mistiness, unlike the dry blue haze of dog-days, *just* visible, between a dew and a fog for density. I sail up the stream, but the wind is hardly powerful enough to overcome the current, and sometimes I am almost at a standstill where the stream is most contracted and swiftest, and there I sit carelessly waiting for the struggle between wind and current to decide itself. Then comes a stronger puff, and I see by the shore that I am advancing to where the stream is broader and runs less swiftly and where lighter breezes can draw me. In contracted and swift-running places, the wind and current are almost evenly matched. It is a pleasing delay, to be referred to the elements, and meanwhile I survey the shrubs on shore. The white cedar shows the least possible life in its extremities now. Put it with the arbor-vitæ, or after it. Poison dogwood beginning to leaf, say yesterday. Nemopanthes out; leafed several days ago. And the clustered andromeda leafed apparently a day or more before it. Gold-thread out. *Viola palmata.* I cannot well examine the stone-heaps, the water is so deep. Muskrats are now sometimes very bold; lie on the surface and come swimming directly toward the boat as if to reconnoitre — this in two cases within a few days. Pretty sure to see a crescent of light under their tails when they dive. The splendid rhodora now sets the swamps on fire with its masses of rich color. It is *one of the first* flowers to catch the eye at a distance in masses, — so naked, unconcealed by its own leaves.

Observed a rill emptying in above the stone-heaps, and afterward saw where it ran out of June-berry

Meadow, and I considered how surely it would have conducted me to the meadow, if I had traced it up. I was impressed as it were by the intelligence of the brook, which for ages in the wildest regions, before science is born, knows so well the level of the ground and through whatever woods or other obstacles finds its way. Who shall distinguish between the *law* by which a brook finds its river, the *instinct* [by which] a bird performs its migrations, and the *knowledge* by which a man steers his ship round the globe? The globe is the richer for the variety of its inhabitants. Saw a large gray squirrel near the split rock in the Assabet. He went skipping up the limb of one tree and down the limb of another, his great gray rudder undulating through the air, and occasionally hid himself behind the main stem. The *Salix nigra* will open to-morrow.

May 18. To Pedrick's meadow.

Viola lanceolata, two days at least. Celandine yesterday. The *V. pedata* beginning to be abundant. Chinquapin was probably a little later to leaf, and will be to flower, than the shrub oak. Its catkins, light-green, remind me of those of the swamp white oak. Buttonwood balls, one third inch in diameter, have been blown off, and *some* have a dull-purplish fuzzy surface (most are solid green); apparently just beginning to blossom. Red cedar shows the least possible sign of starting. The pyrus, probably black-fruited, in bloom as much as two days. Huckleberry. Now for the tassels of the shrub oak; I can find no pollen yet about them, but, as the oak catkins in my pitcher,

plucked yesterday, shed pollen to-day, I think I may say that the bear shrub oak, red and black oaks open to-morrow.[1] I see the pincushion or crimson-tinged galls now on shrub oaks around the bases of the young shoots, — some green-shell ones on oak leaves, like large peas, and small now greenish-white fungus-like ones on swamp-pink. Thus early, before the leaves are a quarter expanded, the gall begins. I see potentillas already ascending five or six inches, but no flower on them, in the midst of low ones in flower. *Smilacina trifolia* will apparently open to-morrow in Pedrick's meadow. A large clay-brown and blotched snake; is it the chicken snake or water adder? Beach plum in full bloom by red house, apparently two or three days. It is one of the very latest plants to leaf; only a few buds just begin to show any green. One man has been a-fishing, but said the water and the wind were too high; caught a few.

High winds all day racking the young trees and blowing off blossoms.

May 19. 5.30 A. M. — To Nawshawtuct and Island.

Ranunculus Purshii will apparently open to-day. Its little green buds somewhat like a small yellow lily. The water has now fallen so much that the grass is rapidly springing up through it on the meadows. Red-wing's nest with two eggs. A geranium, apparently yesterday. Celtis for several days. Button-bush began to leaf, say the 17th; *i. e.*, some of its buds began to burst. Choke-cherry out. *Aralia nudicaulis*, apparently

[1] *Vide* 22d.

yesterday. The red-eye. The early thorn looks as if it would open to-day. I hear the *sprayey*-note frog now at sunset. Now for four or five days, — though they are now for the most part large, — or since the 15th came in, the young and tender oak leaves, disposed umbrella-wise about the extremities of last year's twigs, have been very attractive from their different tints of red. Those of the black and white oaks are, methinks, especially handsome, the former already showing their minute and tender bristles, and all handsomely lobed. Some of the black oak leaves are like a rich, dark-red velvet; the white oak have a paler and more delicate tint, somewhat flesh-colored, though others are more like the black, — what S. calls a maroon red. So of the bear scrub oak; the swamp white and chinquapin are more of a downy or silvery white. The white pine shoots are now two or three inches long generally, — upright light marks on the body of dark green. Those of the pitch pine are less conspicuous. Hemlock does not show yet. The light shoots, an inch or so long, of the fir balsam spot the trees. The larch is a mass of fresh, airy, and cool green. Arbor-vitæ, red cedar, and white show no life except on the closest inspection. They are some of the latest trees. The juniper is about with the fir balsam. I have already described the oaks sufficiently. The hazel is now a pretty green bush. Butternuts, like hickories, make a show suddenly with their large buds. I have not examined the birches, except the white, this year. The alders are slow to expand their leaves, but now begin to show a mass of green along the river, and,

with the willows, afford concealment to the birds' nests. The birds appear to be waiting for this screen. The robin's nest and eggs are the earliest I see. Saw one in the midst of a green-briar over the water the other day, before the briar had put out at all, which shows some foresight, for it will be perfectly invisible, if not inaccessible, soon.

The great poplar is quite late to leaf, especially those that blossom; not yet do they show much, — a silvery leaf. The golden willow is the only tree used about here at the same time for a fence and for shade. It also prevents the causeways from being washed away. The black willow is the largest as well as the handsomest of our native willows. Young elms are leafing pretty fast, old ones are late and slow. The samaræ of the elms first make a thick top, leaf-like, before the leaves come out. Ash trees are like hickories in respect to the size of the young leaves. The young leafets of the wild holly (*Nemopanthes*) on the 17th were peculiarly thin and pellucid, yellow-green. I know of none others like them. Those of the black alder are not only late but dark. The button-bush is not only very late, but the buds are slow to expand, and methinks are very far apart, so that they do not soon make a show; for the most part at a little distance there is no appearance of life in them even yet. The sweet viburnum and also the naked are early to make a show with their substantial leaves. The andromedas are all late, — if I remember, the clustered (?) the earliest. The common swamp-pink is earlier to leaf but later to blossom than the *nudiflora*. The rhodora

is late, and is *naked* flowering. The mountain laurel is one of the latest plants. The resinous dotted leaves of the huckleberry are interesting. The high blueberries are early (to bloom) and resound with the hum of bees. All the cornels begin to leaf apparently *about* the same time, though I do not know but the round-leaved is the earliest.[1] I have not observed the dwarf. The witch-hazel is rather late, and can afford to be. One kind of thorn is well leafed, the other not. The mountain-ash is the first tree which grows here, either naturally or otherwise, to show green at a little distance. Is it not true that *trees* which belong peculiarly to a colder latitude are among our earliest and those which prefer a warmer among our latest? The chokeberry's shining leaf is interesting. With what unobserved secure dispatch nature advances! The amelanchiers have bloomed, and already both kinds have shed their blossoms and show minute green fruit. There is not an instant's pause! The beach plum — such as I have observed — is the latest to begin to expand of all deciduous shrubs or trees, for aught I know. The sight of it suggests that we are near the seacoast, that even our sands are in some sense littoral, — or beaches. The cherries are all early to leaf, but only one, perhaps the wild red, and that in one place, is in mass enough to make much show. The woodbine is well advanced — shoots two or three inches long. It must have begun to leaf more than a week ago. The linden leafs suddenly and rapidly, — a round, thin, transparent-looking (?) leaf.

[1] The *C. florida* is rather late.

A washing day, — a strong rippling wind, and all things bright.

May 20. Woodbine shoots (brick house) already two or three inches long; put it, say, with the red oak. *Potentilla argentea.* White [*sic*] spruce, male flowers. White ash, apparently a day or two. Mr. Prichard's. The English hawthorn opens at same time with our earlier thorn.

Very low thunder-clouds and showers far in the north at sunset, the wind of which, though not very strong, has cooled the air. Saw the lightning, but could not hear the thunder. I saw in the northwest first rise, in the rose-tinted horizon sky, a dark, narrow, craggy cloud, narrow and projecting as no cloud on earth, seen against the rose-tinged sky, — the crest of a thunder-storm, beautiful and grand. The steadily increasing sound of toads and frogs along the river with each successive warmer night is one of the most important peculiarities of the season. Their prevalence and loudness is in proportion to the increased temperature of the day. It is the first earth-song, beginning with the croakers, (the cricket's not yet), as if the very meads at last burst into a meadowy song. I hear a few bullfrogs and but few hylodes. Methinks we always have at this time those washing winds as now, when the choke-berry is in bloom, — bright and breezy days blowing off some apple blossoms.

May 21. *Sunday.* Quince. A slight fog in morning. Some bullfrogs in morning, and I see a yellow swelling

throat. They — these throats — come with the yellow lily. Cobwebs on grass, the first I have noticed. This is one of the *late* phenomena of spring. These little dewy nets or gauze, a faery's washing spread out in the night, are associated with the finest days of the year, days long enough and fair enough for the worthiest deeds. When these begin to be seen, then is not summer come? I notice the fir balsam sterile flowers already effete.

P. M. — To Deep Cut.

A shower, heralded only by thunder and lightning, has kept me in till late in the afternoon. The sterile *Equisetum arvense*, now well up, green the bank. Bluets begin to whiten the fields. A tanager, — the surprising red bird, — against the darkening green leaves. I see a *little* growth in the mitchella. The larger *Populus grandidentata here* are pretty well leaved out and may be put with the young ones. Trientalis, perhaps yesterday. *Smilacina bifolia*, apparently to-morrow. Hear the squeak of a nighthawk. The deciduous trees now begin to balance the evergreens. Red oaks are quite green. Young hemlocks have grown a quarter of an inch; old just started; but by to-morrow they will show their growth by contrast more than the button-bush. Lycopodiums just started, — light or yellowish green tips. *Cornus Canadensis*. The single-berry prinos leafs, say with the other. Was surprised to find a nemopanthes on the upland, — Stow's Clearing. Dangle-berry leafs, say next after the common huckleberry. Young checkerberry reddish shoots just begin to show themselves.

Twilight on river.

The reddish white lily pads here and there and the heart-leaves begin to be seen. A few pontederias, like long-handled spoons. The water going rapidly down, that often purplish bent grass is seen lying flat along it a foot or more, in parallel blades like matting. It is surprising how the grass shoots up now through the shallow water on the meadows, so fresh and tender, you can almost see it grow, for the fall of the water adds to its apparent growth; and the river weeds, too, — flags, polygonums, and potamogetons, etc., etc., — are rapidly pushing up. Sassafras is slow to leaf. A whip-poor-will.

May 22. 5.30 A. M. — Up Assabet.

Now begins the slightly sultryish morning air into which you awake early to hear the faint buzz of a fly or hum of other insect. The teeming air, deep and hollow, filled with some spiritus, pregnant as not in winter or spring, with room for imps, — good angels and bad, — many chambers in it, infinite sounds. I partially awake the first time for a month at least. As if the cope of the sky lifted, the heat stretched and swelled it as a bladder, and it remained permanently higher and more infinite for the summer. Suggesting that the night has not been, with its incidents. Naked-fl[owered] azalea in garden and wood. The dew now wets me completely each morning. Swamp white oak began to blossom apparently yesterday; the anthers completely shed their pollen at once and are effete — only a small part as yet, however. The red oak, *i. e.* at

point of Island; as I did not observe it out on the 19th, say 20th. The white oak will apparently begin to-day.[1] The hemlock may have begun to bloom the 20th. *Cornus florida.* Galls, puff-like, on naked azalea and huckleberries. The later thorn is not much if any later to leaf than the other, apparently. Saw a small diving duck of some kind suddenly dash out from the side of the river above the hemlocks, like my red-breasted merganser, plowing the water with a great noise and flapping, and dive in the middle of the stream. Searching carefully, I after saw its head out amid the alders on the opposite side. When I returned, it again dived in the middle of the stream. Why should it attract my attention first by this rush? Shoots along half risen from the water, striking it with its wings. I saw one of the same family run thus a long way on the Penobscot. *Ranunculus recurvatus* out at V. Muhlenbergii Brook since the 17th; say 19th.

10 A. M. — To Fair Haven by boat.

I see many young and tender dragon-flies, both large and small, hanging to the grass-tops and weeds and twigs which rise above the water still going down. They are weak and sluggish and tender-looking, and appear to have lately crawled up these stems from the bottom where they were hatched, and to be waiting till they are hardened in the sun and air. (A few, however, are flying vigorously as usual over the water.) Where the grass and rushes are thick over the shallow water, I see their large gauze-like wings vibrating in the

[1] Some not open on the 26th.

breeze and shining in the sun. It is remarkable that such tender organizations survive so many accidents.

The black oak apparently began to blossom yesterday. The bear shrub oaks apparently began to bloom with the red, though they are various. Put the chinquapin with them immediately after. Lousewort fairly out in front of geum, on Hill.

Examined the button-bush hummock. It is about eighteen feet by ten at the widest part and from one to one and a half feet thick. It consists chiefly of button-bushes, four or five feet high and now as flourishing as any, a high blueberry (killed), and some water silkweeds springing up (five or six inches) at the foot of the dry stalks, together with the grass and soil they grew in. Though these have been completely covered by the freshet for some weeks since it was deposited here, and exposed to high winds and waves, it has not sensibly washed away. These masses draw so much water that they ground commonly on the edge of the river proper, and so all things combine to make this a border bush or edging. (They are sometimes, when the water is high, dropped in the middle of the meadow, and make islands there.) They thus help to define the limits of the river and defend the edge of the meadow, and, the water being still high, I see at Fair Haven the sweeping lines formed by their broad tops mixed with willows in the midst of the flood, which mark the midsummer boundary of the pond. They not only bear but require a good deal of water for their roots. Apparently these will not feel their removal at all. Every rod or two there is a great hummock of meadow sward

and soil without bushes. The muskrats have already taken advantage of this one to squat on and burrow under, and by raising the shore it will afford them a refuge which they had not before here.

Senecio, probably earlier still at Boiling Spring. *Rhus radicans* apparently leafs with the *Toxicodendron*. The apple bloom is chiefly passed. *Rubus sempervirens* put forth leaf soon after *R. Canadensis*. The dwarf sumach is just starting, some of them decidedly later than the button-bush!

At Clamshell, the small oblong yellow heads of yellow clover, some days. Tall buttercup, a day or two. Dandelions, for some time, gone to seed. Water saxifrage, now well out. As I started away from Clamshell, it was quite warm — the seats — and the water glassy smooth, but a little wind rose afterward. Muskrats are frequently seen to dive a dozen rods from shore and not discovered again. A song sparrow's callow young in nest. A summer yellowbird close by sounded *we we we tchea tchea teche wiss wiss wiss*. I perceive some of that peculiar fragrance from the marsh at the Hubbard Causeway, though the marsh is mostly covered. Is it a particular compound of odors? It is more remarkable and memorable than the scent of any particular plant, — the fragrance, as it were, of the earth itself. The loud cawing of a crow heard echoing through a deep pine wood, — how wild! unconverted by all our preaching. Now and then the dumping sound of frogs. Large pinweed six inches high. Lupines have been out under Fair Haven Hill several days. *Viola pedata* blue the field there.

I rest in the orchard, doubtful whether to sit in shade or sun. Now the springing foliage is like a sunlight on the woods. I was first attracted and surprised when I looked round and off to Conantum, at the smooth, lawn-like green fields and pasturing cows, bucolical, reminding me of new butter. The air so clear — as not in summer — makes all things shine, as if all surfaces had been washed by the rains of spring and were not yet soiled or begrimed or dulled. You see even to the mountains clearly. The grass so short and fresh, the tender yellowish-green and silvery foliage of the deciduous trees lighting up the landscape, the birds now most musical, the sorrel beginning to redden the fields with ruddy health, — all these things make earth now a paradise. How many times I have been surprised thus, on turning about on this very spot, at the fairness of the earth!

The alders (groves) begin to look like great mosses, so compact and curving to the ground at their edges, — as one system. Pairs of yellow butterflies are seen coquetting through the air higher and higher. Comandra, apparently yesterday. I am surprised, as I go along the edge of the Cliffs, at the oppressive warmth of the air from the dry leaves in the woods on the rocks. Compared with the oaks and hickories, the birches are now a dark green. The order of lightness is apparently black oak silvery (and probably large white), red oaks and hickories, *apparently* more advanced, and green white birches, and then pines. Young white oaks on plain are reddish. A pitch pine sheds pollen on Cliffs. The pines are more conspicuous now than ever, miles

off, and the leaves are not yet large enough to conceal them much. It is noon, and I hear the cattle crashing their way down the Cliff, seeking the shade of the woods. They climb like goats. Others seek the water and the shade of bridges. Erigeron, a day or two. It loves moist hillsides.

Landed next at the Miles Swamp. The dense cylindrical racemes of the choke-cherry, some blasted into a puff. Caterpillars prey on this too. I do not find any arums open yet. There are many little gnats dead within them. Barberry at Lee's Cliff, two (??) days; elsewhere just beginning. Some krigias out of bloom. *Galium Aparine* (?), a day or two, but with six (?) leaves. Those scars where the woods were cut down last winter now show, for they are comparatively slow to be covered with green, — only bare dead leaves, reddish-brown spots.

First observe the creak of crickets. It is quite general amid these rocks. The song of only one is more interesting to me. It suggests lateness, but only as we come to a knowledge of eternity after some acquaintance with time. It is only late for all trivial and hurried pursuits. It suggests a wisdom mature, never late, being above all temporal considerations, which possesses the coolness and maturity of autumn amidst the aspiration of spring and the heats of summer. To the birds they say: "Ah! you speak like children from impulse; Nature speaks through you; but with us it is ripe knowledge. The seasons do not revolve for us; we sing their lullaby." So they chant, eternal, at the roots of the grass. It is heaven where

they are, and their dwelling need not be *heaved* up. Forever the same, in May and in November (?). Serenely wise, their song has the security of prose. They have drunk no wine but the dew. It is no transient love-strain, hushed when the incubating season is past, but a glorifying of God and enjoying of him forever. They sit aside from the revolution of the seasons. Their strain is unvaried as Truth. Only in their saner moments do men hear the crickets. It is balm to the philosopher. It tempers his thoughts. They dwell forever in a temperate latitude. By listening to whom, all voices are tuned. In their song they ignore our accidents. They are not concerned about the news. A quire has begun which pauses not for any news, for it knows only the eternal. I hear also *pe-a-wee pe-a-wee*, and then occasionally *pee-yu*, the first syllable in a different and higher key emphasized, — all very sweet and naïve and innocent. *Rubus Canadensis* out, on the rocks. A hummingbird dashes by like a loud humblebee.

May 23. Tuesday. P. M. — To Cedar Swamp by Assabet.

The cobwebs, apparently those I saw on the bushes the morning of the 12th, are now covered with insects, etc. (small gnats, etc.), and are much dilapidated where birds have flown through them. As I paddle up the Assabet, off the Hill, I hear a loud rustling of the leaves and see a large scared tortoise sliding and tumbling down the high steep bank a rod or more into the water. It has probably been out to lay its

eggs. The old coal-pit heap is a favorite place for them. The wood pewee sings now in the woods behind the spring in the heat of the day (2 P. M.), sitting on a low limb near me, *pe-a-wee*, *pe-a-wee*, etc., five or six times at short and regular intervals, looking about all the while, and then, naïvely, *pee-a-oo*, emphasizing the first syllable, and begins again. The last is, in emphasis, like the scream of a hen-hawk. It flies off occasionally a few feet, and catches an insect and returns to its perch between the bars, not allowing this to interrupt their order. Scare up a splendid wood (?) duck, alternate blue and chestnut (?) forward, which flew into and lit in the woods; or was it a teal? Afterward two of them, and my diver of yesterday.

The bent grass now lies on the water (commonly light-colored) for two feet. When I first saw this on a pool this spring, with the deep dimple where the blade emerges from the surface, I suspected that the water had risen gently in calm weather and was heaped about the dry stem as against any surface before it is wetted. But now the water is rapidly falling, and there is considerable wind. Moreover, when my boat has passed over these blades, I am surprised on looking back to see the dimple still as perfect as before. I lift a blade so as to bring a part which was under water to the surface, and still there is a perfect dimple about it; the water is plainly repelled from it. I pull one up from the bottom and passing it over my lips am surprised to find that the front side is perfectly dry from the root upward and cannot be wet, but the back side is wet. It has sprung and grown in the water, and

yet one of its surfaces has never been wet. What an invaluable composition it must be coated with! The same was the case with the other erect grasses which I noticed growing in the water, and with those which I plucked on the bank and thrust into it. But the flags were wet both sides.[1] The one surface repels moisture perfectly.

The barbarea has been open several days. The first yellow dor-bug struggling in the river. The white cedar has now grown quite *perceptibly*, and is in advance of any red cedar which I have seen. Saw a hummingbird on a white oak in the swamp. It is strange to see this minute creature, fit inhabitant of a parterre, on an oak in the great wild cedar swamp. The clustered andromeda appears just ready to open; say to-morrow.[2] The smilacina is abundant and well out here now. A new warbler (?).

We soon get through with Nature. She excites an expectation which she cannot satisfy. The merest child which has rambled into a copsewood dreams of a wilderness so wild and strange and inexhaustible as Nature can never show him. The red-bird which I saw on my companion's string on election days I thought but the outmost sentinel of the wild, immortal camp, — of the wild and dazzling infantry of the wilderness, — that the deeper woods abounded with redder birds still; but, now that I have threaded all our woods and waded the swamps, I have never yet met with his compeer, still less his wilder kindred.[3] The red-

[1] *Vide* scrap-book.

[2] Rather the 25th.

[3] [*Cf. Week*, pp. 56, 57; Riv. 70, 71.]

bird which is the last of Nature is but the first of God. The White Mountains, likewise, were smooth mole-hills to my expectation. We *condescend* to climb the crags of earth. It is our weary legs alone that praise them. That forest on whose skirts the red-bird flits is not of earth. I expected a fauna more infinite and various, birds of more dazzling colors and more celestial song. How many springs shall I continue to see the common sucker (*Catostomus Bostoniensis*) floating dead on our river! Will not Nature select her types from a new fount? The vignette of the year. This earth which is spread out like a map around me is but the lining of my inmost soul exposed. In me is the sucker that I see. No wholly extraneous object can compel me to recognize it. I am guilty of suckers. I go about to look at flowers and listen to the birds. There was a time when the beauty and the music were all within, and I sat and listened to my thoughts, and there was a song in them. I sat for hours on rocks and wrestled with the melody which possessed me. I sat and listened by the hour to a positive though faint and distant music, not sung by any bird, nor vibrating any earthly harp. When you walked with a joy which knew not its own origin. When you were an organ of which the world was but one poor broken pipe. I lay long on the rocks, foundered like a harp on the seashore, that knows not how it is dealt with. You sat on the earth as on a raft, listening to music that was not of the earth, but which ruled and arranged it. Man *should be* the harp articulate. When your cords were tense.

Think of going abroad out of one's self to hear music, — to Europe or Africa! Instead of so living as to be the lyre which the breath of the morning causes to vibrate with that melody which creates worlds — to sit up late and hear Jane Lind!

You may say that the oaks (all but the chestnut oak I have seen) were in bloom yesterday; *i. e.*, shed pollen more or less. Their blooming is soon over. Water-bugs and skaters coupled. Saw in Dakin's land, near the road, at the bend of the river, fifty-nine bank swallows' holes in a small upright bank within a space of twenty by one and a half feet (in the middle), part above and part below the sand-line. This would give over a hundred birds to this bank. They continually circling about over the meadow and river in front, often in pairs, one pursuing the other, and filling the air with their twittering.

Mulberry out to-day.

May 24. 4.30 A. M. — To Cliffs.

A considerable fog, but already rising and retreating to the river. There are dewy cobwebs on the grass. The morning came in and awakened me early, — for I slept with a window open, — and the chip-bird was heard also. As I go along the causeway the [sun] rises red, with a great red halo, through the fog. When I reach the hill, the fog over the river already has its erectile feathers up. I am a little too late. But the level expanse of it far in the east, now lit by the sun, with countless tree-tops like oases seen through it, reminds of vast tracts of sand and of the seashore. It is like a

greater dewy cobweb spread over the earth. It gives a wholly new aspect to the world, especially in that direction. The sun is eating up the fog. As I return down the hill, my eyes are cast toward the very dark mountains in the northwest horizon, the remnants of a hard blue scalloped rim to our saucer. As if a more celestial ware had formerly been united there to our earthen. Old china are they, worth keeping still on our sideboards, though fragmentary.

The early cinquefoil now generally yellows the banks. Put the sage willow with the black for the present. The black spruce apparently blossomed with the white [*sic*], but its leaf-buds have not yet fairly started.

P. M. — To Pedrick's meadow.

The side-flowering sandwort well out in Moore's Swamp. The pyrus has now for some days taken the place of the amelanchier, though it makes less show. How sweet and peculiar the fragrance of the different kinds of cedar! It is imparted to your hands. Lady's-slipper since the 18th; say 22d. Waded into Beck Stow's. The water was so cold at first that I thought it would not be prudent to stand long in it, but when I got further from the bank it was comparatively warm. True, it was not then shaded nor quite so deep, but I suppose there were some springs in the bank. Surprised to find the *Andromeda Polifolia* in bloom and apparently past its prime at least a week or more. It is in water a foot and a half deep, and rises but little above it. The water must have been several inches

higher when it began to bloom. A timid botanist would never pluck it. Its flowers are more interesting than any of its family, almost globular, crystalline white, even the calyx, except its tips, tinged with red or rose. Properly called water andromeda: you must wade into water a foot or two deep to get it. The leaves are not so conspicuously handsome as in the winter. Also the buck-bean, apparently as old, — say a week, — in the same depth of water. The *calyculata* almost completely done, and the high blueberry getting thin. *Potentilla Canadensis* var. *simplex*, perhaps two days. I find a male juniper, with effete blossoms quite large, yet so fresh that I suspect I may have antedated it. Between Beck Stow's and Pedrick's meadow. The red cedar has grown considerably, after all. My *Rubus triflorus* (only Bigelow and Gray place it on hillsides) is nearly out of bloom. It is the same I found at the Miles Swamp; has already some green fruit as big as the *smallest* peas. Must be more than a week old. It is the only annual rubus described. May it not be a new kind?

This evening I hear the hum of dor-bugs, — a few, — but listen long in vain to hear a hylodes.

There being probably no shrub or tree which has not begun to leaf now, I sum up the order of their leafing thus (wild and a few tame).[1]

Their buds begin to burst into leaf: —

The earliest gooseberry in garden and swamp, April 20.
? Elder, longest shoots of any, in *some* places (May 5).
Raspberry in swamps.

[1] *Vide* [p. 255].

Thimble-berry (perhaps in favorable places only).
Wild red cherry in some places.
Meadow-sweet.
? Red currant, but slow to advance; observed only ours, which is late?
? Second gooseberry.
Salix alba, April 27.
?? Black currant, not seen.
Small dark native willow blossoming (?) and leafing.
?? Early willow, two-colored, not seen.
?? Muhlenberg's (?), not seen.
Young black cherry.
Choke-cherry shoots.
? *Viburnum Lentago* " *nudum* } not carefully distinguished between.
Diervilla, advances fast.
Barberry in favorable places.
Some young apples in favorable places.
Young alders, slow to advance, both kinds.
Early rose.
? Moss rose, not seen.
Sweet-fern, slow to advance.
Mountain-ash, May 5, larger leaves than any tree and first to show green at a distance.
Cultivated cherry.
Pyrus arbutifolia.
? Late pyrus, not seen.
Horse-chestnut.
Hazel, May 5.
? Beaked hazel, not distinguished.
Early large apples.
Late gooseberry in garden.
? Pears, not seen.
Wild red cherry generally; or let it go with the earliest.
? Dwarf or sand cherry.
Hardhack.
?? Clematis, shoots five or six inches long, May 16.
Low blackberry.

?? *Rubus triflorus*, eight inches high, May 22.
? Quince.
?? Mayflower, not seen.
Young red maples.
?? Fever-root, four or five inches high, May 12.
Creeping juniper comes forward like fir balsam.
Larch, opens slowly; makes a show, May 12.
Vaccinium Pennsylvanicum.
Amelanchier Botryapium, fast.
High blackberry.
? *Sempervirens*, not seen.
Young rock maple.
? Large white "
Alders generally.
?? Linnæa, not seen.
Ostrya.
Amelanchier oblongifolia.
Early trembles suddenly.
?? Dwarf cassandra.
Balm-of-Gilead.
Early thorns.
? Late " , not seen.
Yellow birch.
? Cockspur thorn, not seen.
Canoe birch, shoots.
White " , shoots.
? Black, young (large not on 12th).
? Canada plum.
Pitch pine.
?? Bear-berry, not seen.
? Norway pine, not seen.
White pine.
Young hornbeam.
Cornus alternifolia.
? Round-leaved [cornel], seen late.
Panicled cornel.
Silky "
Sweet-gale, May 11.

Red oak, May 11.
Bass, sudden.
Young chestnuts and lower limbs; full leafing of large not seen.
?? Clethra, seen late.[1]
Old hornbeam.
?? Maple-leaved arrow-wood, not seen till late.
Arrow-wood.
Butternut.
High blueberry.
Rhus Toxicodendron.
? var. *radicans*, seen late.
Sweet-briar generally; earliest not seen.
? Swamp rose, seen late.
?? Beech, not seen.
White-ash, May 12.
Fir-balsam.
? Fever-bush, seen rather late.
?? Woodbine, not seen.
Black shrub oak.
Elm, young.
? Slippery [elm], not seen.
Great red maples, May 13.
Clustered andromeda, 13th.
Young *Populus grandidentata* (large three or four days later?).
Black oak.
Black willow.
?? Sage " , seen late.
? Chinquapin oak.
?? Chestnut " , not seen.
Celtis.
?? Cranberry.
Locust, 14th.
Nemopanthes.
? Witch-hazel, in our garden.
Swamp white oak, slow.
? Large sugar maples, not well observed.
White swamp-pink.

[1] *Vide* forward.

Buttonwood.
Cornus florida.
Panicled andromeda, not generally; several days later.
? Waxwork, seen but lost place.
Pignut hickory, make a show suddenly.
? Mockernut hickory.
?? Black walnut.
Young white oak (old 15th, slow).
Prinos verticillatus, 15th.
? Single-berry prinos, seen late.
Huckleberries, black.
N. B. — Trees generally!!
Grape.
Smilax.
?? Pinweeds, seen late, six or more inches high; the large, May 22.
?? Cistus, as early at least.
Mulberry, May 16.
?? Carrion-flower, four or five feet long, the 31st of May.
White spruce,[1] slow.
Sassafras, slow.
Lambkill.
?? Mountain laurel, not seen early.
?? *Andromeda Polifolia*, seen late.
? Rhodora.
Tupelo.
Poison-dogwood.
Jersey tea.
Azalea nudiflora, 17th.
Button-bush, but does not show, being few buds.
Beach plum, 19th; *scarcely* makes any show the 24th, no more than the button-bush.
? Red cedar.
White " } growth not obvious, and difference in trees; not sure of date.
Arbor-vitæ
Young hemlocks, 20th; old, 21st.
Checkerberry, 20th, shoots just visible.

[1] ["White" is crossed out in pencil, and "black, white variety" substituted.]

? Mountain sumach, 22d.[1]

? Black spruce,[2] 24th, hardly yet at Potter's.

Of *common* deciduous shrubs or trees, the button-bush is the latest to leaf, and, from the fewness of its buds, *i. e.* the great intervals between them, they appear later than other plants which leaf nearly at the same time. Their being subject to overflows at this season may have to do with this habit, as hardhacks, etc., under these circumstances are equally late.

Of *all* deciduous shrubs and trees the mountain sumach at Hubbard's field is the latest to leaf. I have not observed those under Fair Haven.[3]

The beach plum at a little distance does not make so much show of green even as the button-bush. Do the young shoots show more?

Tree-toads heard oftener, and at evening I hear a dor-bug hum past. The mouse-ear down begins to blow in fields.

May 25. 5.30 A. M. — To Hill.

Smilax. Heard and saw by the sassafras shore the rose-breasted grosbeak, a handsome bird with a loud and very rich song, in character between that of a robin and a red-eye. It sang steadily like a robin. Rose breast, white beneath, black head and above, white on shoulder and wings. The flowering ferns[4] *just begin* to light up the meadow with their yellowish green.

[1] The 31st May it is much more forward than the button-bush at Cliffs, and perhaps started first.

[2] Dark variety. [3] *Vide* May 31. [4] Probably onoclea.

May 26. *Friday.* 5.30 A. M. — To climbing ivy.

Pipe-grass equisetum. Buttercups now densely spot the churchyard. Now for the fragrance of firs and spruce.

P. M. — To Walden.

Horse-radish, several days; rye four feet high. The luxuriant and rapid growth of this hardy and valuable grass is always surprising. How genial must nature be to it! It makes the revolution of the seasons seem a rapid whirl. How quickly and densely it clothes the earth! Thus early it suggests the harvest and fall. At sight of this deep and dense field all vibrating with motion and light, looking into the mass of its pale(?)-green culms, winter recedes many degrees in my memory. This the early queen of grasses with us (?). Indian corn the 2d, or later. It always impresses us at this season with a sense of genialness and bountifulness. Grasses universally shoot up like grain now, in many places deceiving with the promise of a luxuriant crop where in a few weeks they will be dry and wiry. Pastures look as if they were mowing-land. The season of grass, now everywhere green and luxuriant.

The leaves have now grown so much that it [is] difficult to see the small birds in the tree-tops, and it is too late now to survey in woods conveniently. Saw Mr. Holbrook trying an experiment on an elm this morning, which he endeavored in vain to make perpendicular last year with a brace. It was about six inches in diameter, and he had sawed it a little more than half through at about six feet from the ground and then

driven in an ashen wedge about three quarters of an inch thick on the outside. This made it perpendicular, and he was about filling it with clay and protecting it. In Nathan Stow's sprout-land every black cherry is completely stripped of leaves by the caterpillars, and they look *as if* dead, only their great triangular white nests being left in their forks. I see where a frost killed the young white oak leaves and some hickories in deep sprout-land hollows, apparently about a week ago, when the shoots were about an inch long and the leaves about the same. Evergreen-forest note still, — the first syllable three times repeated, *er-er-er*, etc., — flitting amid the tops of the pines. Some young red or scarlet (?) oaks have already grown eighteen inches, *i. e.* within a fortnight, before their leaves have two-thirds expanded. In this instance, perhaps, they have accomplished more than half their year's growth, as if, being held back by winter, their vegetative force had accumulated and now burst forth like a stream which has been dammed. They are properly called *shoots*. Gathered some small pincushion galls on a white oak. They are smaller and handsome, more colored than those I first saw on shrub oaks about a week ago. They are shaped somewhat like little bass-drum sticks with large pads, — on the end of last year's twigs. It is a globular mass composed of fine crystalline rays, somewhat like stigmas, the ground white ones, thickly sprinkled with bright-scarlet (rather than crimson) dimples. This is one of the most faery-like productions of the woods. These young white oak leaves and young leaves generally are downy, — downy-swaddled, as if for protec-

tion against frosts, etc. Are not the more tender the most downy? Why is the downy *Populus grandidentata* so much later than the other? The lint now *begins* to come off the young leaves.

The annular eclipse of the sun this afternoon is invisible on account of the clouds. Yet it seems to have created a strong wind by lowering the temperature? Yellow Bethlehem-star, a day or more; near the broom-rape.

May 27. P. M. — To Saw Mill Brook.

Geum rivale, a day or two at Hubbard's Close; also the *Rubus triflorus* abundant there along the brook next the maple swamp, and still in bloom. Wild pinks (*Silene*), apparently a day or two. The red-eye is an indefatigable singer, — a succession of short bars with hardly an interval long continued, now at 3 P. M. The pincushion galls on young white oaks and on shrub oaks are now in their prime. It is a kind of crystalline wool. Those which I have noticed on the shrub oaks are the largest, and are crimson-spotted, while those on the young white oaks are scarlet-spotted and for the most part about the size of a cranberry. They are either at the extremity of last year's twig or saddled on it midway. No fruit perhaps catches my eye more. It is remarkable that galls are apparently as early to form as the leaves to start, and that some of them are among the most beautiful products of the wood. Within small hard kernels in the midst of these I find minute white grubs. I see and hear the yellow-throated vireo. It is *somewhat* similar (its strain) to that of the red-eye,

prelia pre-li-ay, with longer intervals and occasionally a whistle like *tlea tlow*, or *chowy chow*, or *tully ho* (??) on a higher key. It flits about in the tops of the trees. I find the pensile nest of a red-eye between a fork of a shrub chestnut near the path. It is made, thus far, of bark and different woolly and silky materials. The arums — some of them — have bloomed probably as early as the last I saw at the Miles Swamp. *Viola pubescens* must be about out of bloom (??). *Actæa alba* fully out, the whole raceme, say two days.

I see young gooseberries as big as *small* green peas.

Is that low two or three leaved plant without stem about Saw Mill Brook a wood lettuce?

That tall swamp fern by Eb. Hubbard's Close, with fertile fronds separate and now cinnamon-colored, perhaps a little later than the interrupted, appears to be the *cinnamomea*. Is that very wide, loose-spread fern, three or four feet high, now beginning to fruit terminally, the *spectabilis*, — a large specimen?

May 28. *Sunday*. The *F. hyemalis*, fox-colored sparrow, rusty grackles, tree sparrows, have all gone by; also the purple finch. The snipe has ceased (?) to boom. I have not heard the phœbe of late, and methinks the bluebird and the robin are not heard so often (the former certainly not). Those tumultuous morning concerts of sparrows, tree and song, hyemalis, and grackles, like leaves on the trees, are past, and the woodland quire will rather be diminished than in-

creased henceforth. But, on the other hand, toads and frogs and insects, especially at night, all through June, betray by the sounds they make their sensitiveness to the increasing temperature, and theirs especially is the music which ushers in the summer. Each warmer night, like this, the toads and frogs sing with increased energy, and already fill the air with sound, though the bullfrogs have not yet begun to trump in earnest. To this add the hum and creak of insects. These still herald or expect the summer. The birds do not foretell that.

12 M. — By boat to Lee's Cliff.

Larch cones are now conspicuous and handsome, — dark-crimson, about half an inch long. Pitch pine cones, too, are now handsome. The larch has a little of the sweetness of the fir, etc. Pontederias, flags, *Polygonum hydropiperoides* (just showing itself), that coarse utricularia, often floating, potamogetons, etc., etc., now begin to make a conspicuous border to the river, and its summer limits begin to be defined. Pads began to be eaten by insects as soon as they appeared, though it is still so high that I am obliged to lower my mast at the bridges. Even this spring the arches of the stone bridge were completely concealed by the flood, and yet at midsummer I can sail under them without lowering my mast, which is [ ][1] feet high from the bottom of the boat. Critchicrotches have been edible some time in some places. It must be a kind of water milfoil, whose leaves I now see variously divided under water, and some nearly two feet long.[2]

[1] [A blank space left here.]

[2] Probably *Sium*.

At the *old* bridge at the hill, the water being quite smooth, I saw a water-bug cross straight from the south to the north side, about six rods, furrowing the water in a waving line, there being no other insects near him on the surface. It took but about a minute. It was an interesting sight, proving that this little insect, whose eyes are hardly raised above the plane of the water, sees, or is cognizant of, the opposite shore. I have no doubt that they cross with ease and rapidity lakes a mile wide. It looked like an adventurous voyage for it. Probably he is in danger from fishy monsters, — though it must be difficult for a fish to catch one.

I see the exuviæ or cases of some insects on the stems of water plants above the surface. The large devil's-needles are revealed by the reflection in the water, when I cannot see them in the air, and at first mistake them for swallows. Broom-rape, perhaps yesterday. Thimble-berry out, — at Lee's Cliff day before yesterday at least. Distinguished by the downy under sides of its leaves. I see those large, thin, transparent radical heart(?) leaves[1] floating on the surface, as if bitten off by some creature. I see breams' nests which have been freshly cleared out and are occupied. The *red* choke-berry is fully out, and I do not know but it is as early as the black. Red clover at Clamshell, a day or two. Saw that common snake *Coluber eximius* of De Kay, — checkered adder, etc., etc., — forty-one inches long. A rather light brown above, with large dark-brown, irregularly quadrangular blotches, mar-

[1] *Nuphar Kalmiana.*

gined with black, and similar small ones, on the sides; abdomen light salmon-white, — whitest toward the head, — checkered with quadrangular blotches; very light bluish-slate in some lights and dark-slate or black in others. Abdominal plates 201, caudal scales 45. I should think from Storer's description that his specimen had lost its proper colors in spirits. He describes not the colors of a living snake, but those which alcohol might impart to it(?). It is as if you were to describe the white man as very red in the face, having seen a drunkard only.

The huckleberries, excepting the late, are now generally in blossom, their rich clear red contrasting with the light-green leaves; frequented by honey-bees, full of promise for the summer. One of the great crops of the year. The blossom of the *Vaccinium vacillans* is larger and paler, but higher-colored on one side and more transparent (?), less concealed by leaves. These are the blossoms of the *Vaccinieæ*, or Whortleberry Family, which affords so large a proportion of our berries. The crop of oranges, lemons, nuts, and raisins, and figs, quinces, etc., etc., not to mention tobacco and the like, is of no importance to us compared with these. The berry-promising flower of the *Vaccinieæ*. This crop grows wild all over the country, — wholesome, bountiful, and free, — a real ambrosia (one is called *V. Vitis-Idæa*, Vine of Mt. Ida), — and yet men — the foolish demons that they are — devote themselves to culture of tobacco, inventing slavery and a thousand other curses as the means, — with infinite pains and inhumanity go raise tobacco all their lives. Tobacco

is the staple instead of huckleberries. Wreaths of tobacco smoke go up from this land, the incense of a million sensualists. With what authority can such distinguish between Christians and Mahometans?

Finding the low blackberry nearly open, I looked long and at last, where the vine ran over a rock on the south hillside, the reflected heat had caused it [to] open fully its large white blossoms. In such places, apparently yesterday. The high blackberry in similar places, at least to-day. At these rocks I hear a sharp *peep*, — methinks of a peetweet dashing away. Four pale-green (?) eggs, finely sprinkled with brown, in a brown thrasher's nest, on the ground (!!) under a barberry bush. The night-warbler, after his strain, drops down almost perpendicularly into a tree-top and is lost. The crickets, though it is everywhere an oppressively warm day (yesterday I had a fire!!) and I am compelled to take off my thinnish coat, are heard, particularly amid the rocks at Lee's Cliff. They must love warmth. As if it were already autumn there. White clover under the rocks. I see the ebony spleenwort full-grown. The pitch pines are *rather* past bloom here, — the cobwebs they contain yellowed with their dust, — probably generally in bloom elsewhere. *Turritis stricta*, apparently out of bloom. Young wild cherry under rocks, fully out two or three days; generally or elsewhere not quite out; probably will *begin* to-morrow.

It would be worth the while to ask ourselves weekly, Is our life innocent enough? Do we live *inhumanely*, toward man or beast, in thought or act? To be serene

and successful we must be at one with the universe. The least conscious and needless injury inflicted on any creature is to its extent a suicide. What peace — or life — can a murderer have?

Fair Haven Cliffs.

The lint has begun to come off the young leaves. The birches are still the darkest green to be seen in large masses, except evergreens. The last begin to be less conspicuous, beginning to be lost in the sea of verdure. The shrub oak plain is now fairly greened again, only slightly tinged with redness here and there, where are the youngest white oak leaves.

As I sail down toward the Clamshell Hill about an hour before sunset, the water is smoothed like glass, though the breeze is as strong as before. How is this? Yet I have not seen much smooth water this spring. I think the fall must be the time. The rounded green hills are very fair and elysian. The low clumps of bushes on their sides, just clothed with tender verdure, look like islets half sunk and floating in a cool sea of grass. They do not stand, but float on the cool glaucous swells. Though the grass is really short and thin there. Whole schools of fishes leap out of water at once with a loud plashing, even many rods distant, scared by my sail. Cracks in the earth are still visible, and hips of the late rose still hold on under water in some places.

The inhumanity of science concerns me, as when I am tempted to kill a rare snake that I may ascertain its species. I feel that this is not the means of acquiring true knowledge.

May 29. *Monday.* P. M. — To Cedar Swamp by Assabet.

The white maple keys have begun to fall and float down the stream like the wings of great insects. Dandelions and mouse-ear down have been blowing for some time and are seen on water. These are interesting as methinks the first of the class of downy seeds which are more common in the fall. There are myriads of shad-flies fluttering over the dark and still water under the hill, one every yard or two, continually descending, almost falling, to the surface of the water as if to drink and then, with perhaps a little difficulty, rising again, again to fall upon it, and so on. I see the same one fall and rise five or six feet thus four or five times; others rise *much* higher; and now comes along a large dragon-fly and snatches one. This two or three times. Other smaller insects, light-colored, are fluttering low close to the water, and in some places are swarms of small black moths. *Viburnum Lentago* in a warm place. The choke-cherry is leaving off to bloom, now that the black cherry is beginning. The clustered andromeda is not yet fully, *i. e.* abundantly, out. The tall huckleberry in swamps is well out. In the longitudinal crevices of the white cedar bark there is much clear yellow resin. Raspberry, probably yesterday, side of railroad, above red house. See a purple finch and hear him, — robin-like and rich warbling. S. Barrett thinks that many chubs are killed at mills, and hence are seen floating. I see no stone-heaps distinctly formed yet.

Saw what I thought my night-warbler, — sparrow-

like with chestnut (?) stripes on breast, white or whitish below and about eyes, and perhaps chestnut (??) head.

Stellaria longifolia, apparently apetalous (!), ten or twelve inches high, will soon open on the bank near the *Ranunculus abortivus*.

These days it is left to one Mr. Loring to say whether a citizen of Massachusetts is a slave or not. Does any one think that Justice or God awaits Mr. Loring's decision? Such a man's existence in this capacity under these circumstances is as impertinent as the gnat that settles on my paper. We do not ask him to make up his mind, but to make up his pack. Why, the United States Government never performed an act of justice in its life! And this unoffending citizen is held a prisoner by the United States soldier, of whom the best you can say is that he is a fool in a painted coat. Of what use a Governor or a Legislature? they are nothing but politicians. I have listened of late to hear the voice of a Governor, Commander-in-Chief of the forces of Massachusetts. I heard only the creaking of the crickets and the hum of the insects which now fill the summer air. The Governor's exploit is to review the troops on muster-days. I have seen him on horseback, with his hat off, listening to a chaplain's prayer. That is all I have ever seen of a Governor. I think that I could manage to get along without one. When freedom is most endangered, he dwells in the deepest obscurity. A distinguished clergyman once told me that he chose the profession of a clergyman because it afforded the most leisure for literary pur-

suits. I would recommend to him the profession of a Governor. I see the papers full of soft speeches of the mayor and the Governor and brother editors. I see the Court-House full of armed men, holding prisoner and trying a MAN, to find out if he is not really a SLAVE. It is a question about which there is great doubt.[1]

It is really the trial of Massachusetts. Every moment that she hesitates to set this man free, she is convicted. The Commissioner on her case is God.[2] Perhaps the most saddening aspect of the matter is the tone of almost all the Boston papers, connected with the fact that they are and have been of course sustained by a majority of their readers. They are feeble indeed, but only as sin compared with righteousness and truth. They are eminently time-serving. I have seen only the *Traveller*, *Journal*, and *Post*. I never look at them except at such a time as this. Their life is abject even as that of the marines. Men in any office of government are everywhere and forever politicians. Will mankind never learn that policy is not morality, that it never secures any moral right, but always considers merely what is "expedient," — chooses the available candidate, who, when moral right is concerned, is always the devil? Witness the President of the United States. What is the position of Massachusetts? (Massachooses-it!) She leaves it to a Mr. Loring to decide whether one of her citizens is a freeman or a slave. What is the value of such a SHE'S FREEDOM AND

[1] [*Cape Cod, and Miscellanies*, pp. 389, 390; *Misc.*, Riv. 172, 173.]

[2] [*Cape Cod, and Miscellanies*, p. 394; *Misc.*, Riv. 178.]

PROTECTION to me? Perhaps I shall so conduct that she will one day offer me the FREEDOM OF MASSACHUSETTS in a gold casket, — made of California gold in the form of a court-house, perchance. I spurn with contempt any bribe which she or her truckling men can offer. I do not vote at the polls. I wish to record my vote here. Men profess to be surprised because the devil does not behave like an angel of light. The majority of the men of the North, and of the South and East and West, are not men of principle. If they vote, they do not send men to Congress on errands of humanity; but, while their brothers and sisters are being scourged and hung for loving liberty, while (insert here all the inhumanities that pandemonium can conceive of), it is the mismanagement of wood and iron and stone and gold which concerns them. Do what you will, O Government, with my mother and brother, my father and sister, I will obey your command to the letter. It will, indeed, grieve me if you hurt them, if you deliver them to overseers to be hunted by hounds, and to be whipped to death; but, nevertheless, I will peaceably pursue my chosen calling on this fair earth, until, perhaps, one day I shall have persuaded you to relent. Such is the attitude, such are the words of Massachusetts. Rather than thus consent to establish hell upon earth, — to be a party to this establishment, — I would touch a match to blow up earth and hell together. As I love my life, I would side with the Light and let the Dark Earth roll from under me, calling my mother and my brother to follow me.[1]

[1] [*Cape Cod, and Miscellanies*, pp. 400, 401; *Misc.*, Riv. 186, 187.]

May 30. *Tuesday.* Whiteweed. *Spergularia rubra,* apparently a day or two, side of railroad above red house. Yarrow.

P. M. — To Clintonia Swamp and Pond.

Saw a black snake, dead, four feet three inches long, slate-colored beneath. Saw what was called a California cat which a colored man brought home from California, — an animal at least a third smaller than a cat and shaped more like a polecat or weasel, brown-gray, with a cat-like tail of alternate black and white rings, very large ears, and eyes which were prominent, long body like a weasel, and sleeps with its head between its fore paws, curling itself about; a rank smell to it. It was lost several days in our woods, and was caught again in a tree about a crow's nest.

Ranunculus repens, perhaps a day or two; channelled peduncle and spreading calyx and conspicuously spotted leaves. The leaves of the tall buttercup are much larger and finely cut and, as it were, peltate. Pickerel are not easily detected, — such is their color, — as if they were transparent. Vetch. I see now green high blueberries, and gooseberries in Hubbard's Close, as well as shad-bush berries and strawberries. In this dark, cellar-like maple swamp are scattered at pretty regular intervals tufts of green ferns, *Osmunda cinnamomea,* above the dead brown leaves, broad, tapering fronds, curving over on every side from a compact centre, now three or four feet high. Wood frogs skipping over the dead leaves, whose color they resemble. Clintonia. Medeola. The last may be earlier. I am surprised to find arethusas abundantly out in Hub-

bard's Close, maybe two or three days, though not yet at Arethusa Meadow, probably on account of the recent freshet. It is so leafless that it shoots up unexpectedly. It is all color, a little hook of purple flame projecting from the meadow into the air. Some are comparatively pale. This high-colored plant shoots up suddenly, all flower, in meadows where it is wet walking. A superb flower. Cotton-grass here also, probably two or three days for the same reason. *Eriophorum polystachyon* var. *latifolium*, having rough peduncles.

The twigs of the dwarf willow, now gone to seed, are thickly invested with cotton, containing little green seed-vessels, like excrement of caterpillars, and the shrubs look at a little distance like sand cherries in full bloom. These are among the downy seeds that fly.

Found a ground-robin's nest, under a tuft of dry sedge which the winter had bent down, in sprout-land on the side of Heywood Peak, perfectly concealed, with two whitish eggs very thickly sprinkled with brown; made of coarse grass and weed stems and lined with a *few* hairs and *stems* of the mahogany moss.

The pink is certainly one of the finest of our flowers and deserves the place it holds in my memory. It is now in its prime on the south side of the Heywood Peak, where it grows luxuriantly in dense rounded tufts or hemispheres, raying out on every side and presenting an even and regular surface of expanded flowers. I count in one such tuft, of an oval form twelve inches by eight, some three hundred fully open

and about three times as many buds, — more than a thousand in all. Some tufts consist wholly of white ones with a very faint tinge of pink. This flower is as elegant in form as in color, though it is not fragrant. It is associated in my mind with the first heats of summer, or [those] which announce its near approach. Few plants are so worthy of cultivation. The shrub oak pincushion (?) galls are larger, whiter, and less compact than those of the white oak. I find the linnæa, and budded, in Stow's Wood by Deep Cut.

Sweet flag. Waxwork to-morrow.[1] I see my umbrella toadstool on the hillside has already pierced the ground.

May 31. Old Election. Cold weather. Many go a-fishing to-day in earnest, and one gets forty pouts in river. Locust.

P. M. — To Miles Meadow by boat.

A cold southeast wind. Blue-eyed grass, apparently in pretty good season. Saw a greater telltale, and this is the only one I have seen probably; distinguished by its size. It is very watchful, but not timid, allowing me to come quite near, while it stands on the lookout at the water's edge. It keeps nodding its head with an awkward jerk, and wades in the water to the middle of its yellow legs; goes off with a loud and sharp *phe phe phe phe*, or something like that. It acts the part of the telltale, though there are no birds here, as if [it] were with a flock. Remarkable as a sentinel for other birds. I think I see a few clams come up. The

[1] June 1st.

mountain sumach at the Cliffs is much more forward than at Hubbard's, and perhaps is earlier to leaf than the button-bush. Alternate cornel, apparently yesterday. Cockspur thorn is well out; how long?

Maidenhair fern, how handsome!

VII

JUNE, 1854

(ÆT. 36)

June 1. 4.30 A. M. — To Hill.

Fever-root. The umbrella toadstool yesterday, and now decaying. A smaller one.

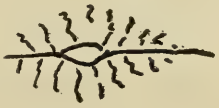
It was so cold last night and still that I surely expected a frost and covered all our melons. But either the wind changed or clouds came over in the night, and there was no frost here. Here is another cool day. I sit with window shut and walk with a thick coat, as yesterday. Do we not always have these changes about the first of June?

P. M. — To Bare Hill *via* Walden road and Goose Pond.

Below the almshouse I see a small sparrow, not larger than the field sparrow, with a white line down the middle of the head, a tawny throat and breast, a yellow spot over the eye and another on the forward part of the wings, flesh-colored legs, upper mandible dusky, and wings dark with faint lines of white. Undoubtedly the *Fringilla passerina*. There were two. Its note was that of my seringo, but very faint and short, sitting on the wall or fence-post.

I see caterpillars, now full-grown, clustered upon their great nests on stripped cherry trees in the woods.

Hear my evergreen-forest note, sounding rather raspingly as usual, where there are large oaks and pines mingled, — *er-er te, te ter twee*, or *er te, te ter twe*.[1] It is very difficult to discover now that the leaves are grown, as it frequents the tops of the trees. But I get a glimpse of its black throat and, I think, yellow head. This and the red-eye and wood pewee are singing now at midday. The pincushion galls of the shrub oaks have but little color compared with those of the white oak, and are now turning brown. The shrub oak ones are larger but plainer, less spotted, and less distinctly spotted, than the others. Galls are a surprising production of nature, suggesting a union or connivance of two kingdoms, the animal and vegetable, to produce. Many, like the ordinary black oak-balls (I see some fully grown), seem as natural to the tree as its proper fruit, and plainly anticipated by its whole economy. We hesitate to pronounce them abortions. Their grub is a foster-child of the oak. I see equally if not more remarkable and regular ones on a black shrub oak, of this form, attached to a leaf, green, — a core like this:



Being filled with air, they burst with a puff when pressed.

I see marks of a frost last night in sprout-land hollows; young white oaks and hickories, and some

[1] [A good rendering of the song of the black-throated green warbler.]

other oaks even, have been touched, and, though not yet black, their leaves are crisped and come off. In wood-paths and elsewhere I now see countless dragon-flies which have lately taken wing, — some of those pretty little blue ones, and various colors. One of those biting flies stabs my finger severely, wings half black, with a green front.

Within little more than a fortnight the woods, from bare twigs, have become a sea of verdure, and young *shoots* have contended with one another in the race. The leaves have unfurled all over the country like a parasol. Shade is produced, and the birds are concealed and their economies go forward uninterruptedly, and a covert is afforded to the animals generally. But thousands of worms and insects are preying on the leaves while they are young and tender. Myriads of little parasols are suddenly spread all the country over, to shield the earth and the roots of the trees from parching heat, and they begin to flutter and rustle in the breeze. Checkerberry shoots in forward places are now just fit to eat, they are so young and tender. In a long walk I have found these somewhat refreshing. From Bare Hill there is a bluish mist on the landscape, giving it a glaucous appearance.

Now I see gentlemen and ladies sitting at anchor in boats on the lakes in the calm afternoons, under parasols, making use of nature, not always accumulating money. The farmer hoeing is wont to look with scorn and pride on a man sitting in a motionless boat a whole half-day, but he does not realize that the object of his own labor is perhaps merely to add another dollar to

his heap, nor through what coarseness and inhumanity to his family and servants he often accomplishes this. He has an Irishman or a Canadian working for him by the month; and what, probably, is the lesson that he is teaching him by precept and example? Will it make that laborer more of a man? this earth more like heaven? The veiny-leaved hawkweed to-morrow. I see the sand cherry in puffs like the Canada plum in some places.

June 2. Friday. P. M. — Up Assabet to Castilleja and Annursnack.

While waiting for Mother and Sophia I look now from the yard to the waving and slightly glaucous-tinged June meadows, edged by the cool shade — gelid — of shrubs and trees, — a waving shore of shady bays and promontories, — yet different from the August shades. It is beautiful and elysian. The air has now begun to be filled with a bluish haze. These virgin shades of the year, when everything is tender, fresh and green, — how full of promise! promising bowers of shade in which heroes may repose themselves! I would fain be present at the birth of shadow. It takes place with the first expansion of the leaves.

I find sanicle just out on the Island. The black willows are already beautiful, and the hemlocks with their bead-work of new green. Are these not kingbird days, when, in clearer first June days full of light, this aërial, twittering bird flutters from willow to willow and swings on the twigs, showing his white-edged

tail? The *Azalea nudiflora* has about done, or there was apparently little of it. I see some breams' nests near my old bathing-place above the stone-heaps, with sharp, yellow, sandy edges, like a milk-pan from within,

showing considerable art (?) as well as labor. Also there are three or four small stone-heaps formed. We went near to the stone bridge and crossed direct *via* the house-leek, of which I brought home a bunch. No *Stellaria longifolia* nor *Ranunculus abortivus* to be found yet in bloom, though probably some of the first, apetalous, have opened now. Lamb-kill. The Painted-Cup Meadow is all lit up with ferns, on its springy slopes. The handsome flowering fern, now rapidly expanding and fruiting at the same time, colors these moist slopes afar with its now commonly reddish fronds. And then there are the interrupted and the cinnamon ferns in very handsome and regular tufts, and the brakes standing singly and more backward. The rue, just budded, smells remarkably like a skunk and also like a rank dog. Strange affinity! Took tea at Mrs. Barrett's.

When we returned to our boat at 7 P. M., I noticed first, to my surprise, that the river was all alive with leaping fish, their heads seen continually darted above water, and they were large fish, too. Looking up I found that the whole atmosphere over the river was full of shad-flies. It was a *great flight of ephemeræ*. It was not so when I landed an hour and a half before. They extended as high as I could see. It was like a dense snow-storm, and all (with very few exceptions) flying

as with one consent up the stream. Many coupled in the air, and many more with the bodies curved. They reached a mile or more from the stone-heaps to the mouth of the Assabet, but were densest where there were woods on both sides, whether they came out of them, or they made the air more still for them. Those I examined had three very long streamers behind, the two outside about an inch and a quarter. The fishes I saw rise for such as were struggling on the water close to the boat were, I am pretty sure, suckers. This is like what the French fishermen call "manna." There were also swarms of small black millers close above the surface, and other small ones. Several dead suckers were floating. It seemed as if the suckers were now ascending the river. In the air there was one or more at least to every foot. Apparently this phenomenon reached on this stream as far as it was wooded.

Caraway naturalized, and out apparently two or three days, in S. Barrett's front yard.

June 3. *Saturday.* 9 A. M. — To Fair Haven with Blake and Brown.

A very warm day, without a breeze. A kingbird's nest in a fork of a black willow. Going up Fair Haven Hill, the blossoms of the huckleberries and blueberries imparted a sweet scent to the whole hillside. The cistus is well out on the Cliffs; maybe several days. At Lee's Cliff, where we dined, the oxalis pretty early (?). Hear the first, but a faint, locust.[1] On the pond,

[1] Was it not a cricket?

played a long [time] with the bubbles which we made with our paddles on the smooth, perhaps unctuous, surface, in which little hemispherical cases we saw ourselves and boat, small, black and distinct, with a fainter reflection on the opposite side of the bubble (head to head). These lasted sometimes a minute before they burst. They reminded me more of Italy than of New England. Crossed to Baker Farm and Mt. Misery. To-day, having to seek a shady and the most airy place, at length we were glad when the east wind arose, ruffled the water and cooled the air, and wafted us homeward. Reflected how many times other similar bubbles, which had now burst, had reflected here the Indian, his canoe and paddle, with the same faithfulness that they now image me and my boat.

June 4. 8 A. M. — Up Assabet to Barbarea Shore with Blake and Brown.

Brown speaks of a great brown moth, — probably emperor moth, — which came out in Worcester a few days ago. I see under the window, half dead, a large sphinx-*like* moth which apparently flew last night. The surface of the still water nowadays with a kind of lint, looking like dust at a little distance. Is it the down of the leaves blown off? In many places it reaches quite across the river. It is interesting to distinguish the different surfaces, — here broken into waves and sparkling with light, there, where covered with this linty dust or film, merely undulating without breaking, and there quite smooth and stagnant. I see in one place a sharp

and distinct line, as if there were a cobweb on the water, between the clear and ruffled water and the stagnant filmy part, as if it were a slightly raised seam; and particles of lint (?) are continually gliding in from the clear space and arranging themselves along the edge of the scum or film.

These warm and dry days, which put spring far behind, the sound of the cricket at noon has a new value and significance, so serene and cool. It is the *iced*-cream of song. It is modulated shade. I see now here and there deep furrows in the sandy bottom, two or three inches wide, leading from the middle of the river toward the side, and a clam on its edge at the end of each. These are distinct whiter lines. Plainly, then, about these times the clams are coming up to the shore, and I have caught them in the act. I now notice froth on the pitch and white pines. The lower and horizontal parts of the shaggy button-bushes, now left bare, are covered thickly with dry brown-paper confervæ, for the most part bleached almost white. It is very abundant, and covers these stems more thickly than clothes on a line.

P. M. — To Walden.

Now is the time [to] observe the leaves, so fair in color and so perfect in form. I stood over a sprig of choke-cherry, with fair and perfect glossy green obovate and serrate leaves, in the woods this P. M., as if it were a rare flower. Now the various forms of oak leaves in sprout-lands, wet-glossy, as if newly painted green and varnished, attract me. The chinquapin and

black shrub oak are such leaves as I fancy crowns were made of. And in the washing breeze the lighter under sides begin to show, and a new light is flashed upon the year, lighting up and enlivening the landscape. Perhaps, on the whole, as most of the under sides are of a glaucous hue, they add to the glaucous mistiness of the atmosphere, which now has begun to prevail. The mountains are hidden. Methinks the first dry spell or drought may be beginning. The dust is powdery in the street, and we do not always have dew in the night.

The cracks in the ground made by the frost in the winter are still quite distinct.

In some cases fame is perpetually false and unjust. Or rather I should say that she *never* recognizes the simple heroism of an action, but only as connected with its apparent consequence. It praises the interested energy of the Boston Tea Party, but will be comparatively silent about the more bloody and disinterestedly heroic attack on the Boston Court-House, simply because the latter was unsuccessful. Fame is not just. It never finely or discriminatingly praises, but coarsely hurrahs. The truest acts of heroism never reach her ear, are never published by her trumpet.[1]

June 5. 6 P. M. — To Cliffs.

Large yellow butterflies with black spots since the 3d. Carrion-flower, maybe a day. Dangle-berry, probably June 3d at Trillium Woods. Now, just before sundown, a nighthawk is circling, imp-like, with

[1] [*Cape Cod, and Miscellanies*, p. 403; *Misc.*, Riv. 190, 191.]

undulating, irregular flight over the sprout-land on the Cliff Hill, with an occasional squeak and showing the spots on his wings. He does not circle away from this place, and I associate him with two gray eggs somewhere on the ground beneath and a mate there sitting. This squeak and occasional booming is heard in the evening air, while the stillness on the side of the village makes more distinct the increased hum of insects. I see at a distance a kingbird or blackbird pursuing a crow lower down the hill, like a satellite revolving about a black planet. I have come to this hill to see the sun go down, to recover sanity and put myself again in relation with Nature. I would fain drink a draft of Nature's serenity. Let deep answer to deep. Already I see reddening clouds reflected in the smooth mirror of the river, a delicate tint, far off and elysian, unlike anything in the sky as yet. The evergreens now look even black by contrast with the sea of fresh and light-green foliage which surrounds them. Children have been to the Cliffs and woven wreaths or chaplets of oak leaves, which they have left, for they were unconsciously attracted by the beauty of the leaves now. The sun goes down red and shorn of his beams, a sign of hot weather, as if the western horizon or the lower stratum of the air were filled with the hot dust of the day. The dust of his chariot eclipses his beams. I love to sit here and look off into the broad deep vale in which the shades of night are beginning to prevail. When the sun has set, the river becomes more white and distinct in the landscape. The pincushion galls have mostly turned brown, especially

the shrub oak ones. Perhaps the sorrel was most noticeable last week. The caterpillars are and have been very numerous this year. I see large trees (wild cherry and apple) completely stripped of leaves. Some of the latter, twenty or thirty feet high, are full of blossoms without a single leaf. I return by moonlight.

June 6. *Tuesday.* I perceive the sweetness of the locust blossoms fifteen or twenty rods off as I go down the street.

P. M. — To Assabet Bathing-Place and return by stone bridge.

I see now great baggy light-green puffs on the panicled andromeda, some with a reddish side, two or three inches through. The *Stellaria longifolia* has been out, apparently, a day or two. A slender rush, flowered at the top, at bathing-place, some time.

The painted tortoises are nowadays laying their eggs. I see where they have just been digging in the sand or gravel in a *hundred* places on the southerly sides of hills and banks near the river, but they have laid their eggs in *very* few. I find none whole. Here is one which has made its hole with the hind part of its shell and its tail apparently, and the ground is wet under it. They make a great deal of water at these times, apparently to soften the earth or to give it consistency, or both. They are remarkably circumspect, and it is difficult to see one working. They stop instantly and draw in their heads, and do not move till you are out of sight, and then probably try a new place.

They have dabbled in the sand and left the marks of their tails all around.

The black oaks, birches, etc., etc., are covered with ephemeræ of various sizes and colors, with one, two, three, or no streamers, ready to take wing at evening, *i. e.* about seven. I am covered with them and much incommoded. There is garlic by the wall, not yet out. The air over the river meadows is saturated with sweetness, but I look round in vain on the yellowish sensitive fern and the reddish eupatorium springing up. From time to time, at mid-afternoon, is heard the trump of a bullfrog, like a Triton's horn.

I am struck now by the large light-purple *Viola palmata* rising above the grass near the river.

There are: —

The small, firm, few-lobed, wholesome, dark-green shrub oak leaf, light beneath.

The more or less deeply cut, and more or less dark green or sometimes reddish black oak, not light beneath. These two bristle-pointed.

The very wet-glossy, obovatish, sinuate-edged swamp white oak, light beneath.

The small narrower, sinuated, and still more chestnut-like chinquapin, little lighter beneath.

All these more or less glossy, especially the swamp white and shrub.

Then the dull-green, *sometimes* reddish, more or less deeply cut or fingered, unarmed, round-lobed white oak, not light beneath. The last three without bristles.

I remember best the sort of rosettes made by the wet-glossy leaves at the ends of some swamp white

oak leaves [*sic*], also the wholesome and firm dark-green shrub oak leaves, and some glossy and finely cut light-green black (?) or red (?) or scarlet (?).

I see some devil's-needles, a brilliant green, with white and black or openwork and black wings, — some with clear black wings, some white bodies and black wings, etc.

White pine.

6.30 A. M. [*sic*]. — Up Assabet.

Rhus Toxicodendron, yesterday, on Rock. *Smilacina racemosa*, probably June 4th. Beautiful the hemlock-fans, now broad at the ends of the lower branches, which slant down, seen in the shade against the dark hillside. Such is the contrast of the very light green just put forth on their edges with the old very dark, I feast my eyes on it. Pignut. A crow blackbird's nest in a white maple this side the Leaning Hemlocks, in a crotch seven or eight feet from ground; somewhat like a robin's, but larger, made of coarse weed stems, mikania, and cranberry vines (without leaves), fish-lines, etc., without, and of mud lined with finer fibres or roots within; four large but blind young covered with dark down. Sphinx moths about the flowers — honeysuckles — at evening, a night or two.

June 7. Wednesday. 6 A. M. — Up railroad.

Viburnum dentatum. Grape yesterday. *Viburnum nudum*, June 5. A thick fog this morning, through which at last rain falls, — the first after a considerable and first dry spell. As yet nothing has suffered from

dryness; the grass is very green and rank, owing to the cold spring, the June-grass converting hillside pastures into mowing-land, and the seeds (or chaff ?) of many grasses begin to fall on my shoes.

P. M. — To Dugan Desert *via* Linnæa Hills.

Curled dock. Linnæa abundantly out some days; say 3d or 4th. It has not rained since morning, but continues cloudy and is warm and muggy, the sun almost coming out. The birds sing now more than ever, as in the morning, and mosquitoes are very troublesome in the woods. The locusts so full of pendulous white racemes five inches long, filling the air with their sweetness and resounding with the hum of humble and honey bees, are very interesting. These racemes are strewn along the path by children. Is that the *Cratægus Crus-Galli*, roadside between Joe Hosmer's and Tarbell's? Again I am struck by the rank, dog-like scent of the rue budded to blossom. Along the wood-paths and in wood-side pastures I see the golden basins of the cistus. I am surprised at the size of green berries, — shad-bush, low blueberries, choke-cherries, etc., etc. It is but a step from flowers to fruit.

As I expected I find the desert scored by the tracks of turtles, made evidently last night, though the rain of this morning has obliterated the marks of their tails. The tracks are about seven eighths of an inch in diameter, one half inch deep, two inches apart (from centre to centre) in each row, and the rows four or five inches apart; and they have dabbled in the sand in many places and made some small holes. Yesterday

was hot and dusty, and this morning it rained. Did they choose such a time? Yesterday I saw the painted and the wood tortoise out. Now I see a snapping turtle, its shell about a foot long, out here on the damp sand, with its head out, disturbed by me. It had just been excavating, and its shell — especially the fore part and sides — and especially its snout, were deeply covered with earth. It appears to use its shell as a kind of spade whose handle is within, tilting it now this way, now that, and perhaps using its head and claws as a pick. It was in a little cloud of mosquitoes, which were continually settling on its head and flippers, but which it did not mind. Its sternum was slightly depressed. It seems that they are very frequently found fighting in the water and sometimes dead in the spring, maybe killed by the ice. Some think that the suckers I see floating are killed by the ice.

The *Linaria Canadensis* well out, near Heart-leaf Pond. How long? *Œnothera pumila* in low ground. Angelica at Nut Meadow Brook. The low blackberry leaves on Dennis's lupine hill are now covered beneath with that orange rust.[1] Were those premature scarlet leaves which I saw at the Rock on the 4th the shad-bush?[2] Common iris, some days; *one withered.*

Saw again what I have pronounced the yellow-winged sparrow (*Fringilla passerina*), with white line down head and yellow over eyes and my seringo note; but this time yellow of wings not apparent; ochreous throat and breast; quite different from the bay-winged,

[1] The same on thimble-berry the 13th June.

[2] Yes; it was dying.

and smaller. Does the bay-wing make the seringo note?[1]

Now the river is reduced to summer width. It is in the spring that we observe those dark-blue lakes on our meadows. Now weeds are beginning to fill the stream.

This muggy evening I see fireflies, the first I have seen or heard of at least. This louring day has been a regular fisherman's day, and I have seen many on the river, a general turnout.

June 8. *Thursday.* A. M. — Gentle, steady rainstorm.

The *Rosa nitida* bud which I plucked yesterday has blossomed to-day, so that, notwithstanding the rain, I will put it down to to-day.

P. M. — On river.

Sidesaddle, apparently to-morrow (?). Earliest and common potamogeton. *Erigeron strigosus* slowly opening, perhaps to-morrow.[2] Meadow-rue, with its rank dog-like scent. Ribwort plantain is abundantly in bloom, fifteen or sixteen inches high; how long? *Utricularia vulgaris.* Young robins in nest.

Herndon, in his "Exploration of the Amazon," says that "there is wanting an industrious and active population, who know what the comforts of life are, and who have artificial wants to draw out the great resources of the country." But what are the "artificial wants" to be encouraged, and the "great resources" of a country? Surely not the love of luxuries like the tobacco and slaves of his native (?) Virginia, or that fer-

[1] No. [2] *Vide* 14th.

tility of soil which produces these. The chief want is ever a life of deep experiences, — that is, character, — which alone draws out "the great resources" of Nature. When our wants cease to be chiefly superficial and trivial, which is commonly meant by artificial, and begin to be wants of character, then the great resources of a country are taxed and drawn out, and the result, the staple production, is poetry. Have the "great resources" of Virginia been drawn out by such "artificial wants" as there exist? Was that country really designed by its Maker to produce slaves and tobacco, or something more even than freemen and food for freemen? Wants of character, aspirations, — this is what is wanted; but what is called civilization does not always substitute this for the barren simplicity of the savage.[1]

June 9. *Friday.* P. M. — To Well Meadow.

The summer aspect of the river begins perhaps when the *Utricularia vulgaris* is first seen on the surface, as yesterday. As I go along the railroad causeway, I see, in the cultivated grounds, a lark flashing his white tail, and showing his handsome yellow breast, with its black crescent like an Indian locket. For a day or two I have heard the fine seringo note of the cherry-birds, and seen them flying past, the only (?) birds, methinks, that I see in small flocks now, except swallows. The willow down and seeds are blowing over the causeway. *Veronica scutellata,* apparently several days. A strawberry half turned on the sand of

[1] [*Cape Cod, and Miscellanies,* pp. 479, 480; *Misc.,* Riv. 284.]

the causeway side, — the first fruit or berry of the year that I have tasted. Ladies'-slippers are going to seed. I see some white oak pincushions, nearly two inches through.

Is that galium, out apparently some days in the woods by Deep Cut, near Linnæa, *triflorum* or *Aparine?* [1] *Vide* Maps. Compare that at Lee's. I should like to know the birds of the woods better, what birds inhabit our woods? I hear their various notes ringing through them. What musicians compose our woodland quire? They must be forever strange and interesting to me. How prominent a place the vireos hold! It is probably the yellow-throated vireo I hear now, — a more interrupted red-eye with its *prelia—prelioit* or *tully-ho*, — invisible in the tops of the trees. I see the thick, flower-like huckleberry apples. Haynes (?), Goodwin's comrade, tells me that he used to catch mud turtles in the ponds behind Provincetown with a toad on a mackerel hook thrown into the pond and the line tied to a stump or stake on shore. Invariably the turtle when hooked crawled up, following the line to the stake, and was there found waiting — Goodwin baits minks with muskrats.

Find the great fringed orchis out apparently two or three days. Two are almost fully out, two or three only budded. A large spike of peculiarly delicate pale-purple flowers growing in the luxuriant and shady swamp amid hellebores, ferns, golden senecios, etc., etc. It

[1] Call it the first, for it has less prickles or angles, has smaller and less prickly fruit, rather three separate than three couples, and is more spreading and reclining, and is later?

is remarkable that this, one of the fairest of all our flowers, should also be one of the rarest, — for the most part not seen at all. I think that no other but myself in Concord annually finds it. That so queenly a flower should annually bloom so rarely and in such withdrawn and secret places as to be rarely seen by man! The village belle never sees this more delicate belle of the swamp. How little relation between our life and its! Most of us never see it or hear of it. The seasons go by to us as if it were not. A beauty reared in the shade of a convent, who has never strayed beyond the convent bell. Only the skunk or owl or other inhabitant of the swamp beholds it. In the damp twilight of the swamp, where it is wet to the feet. How little anxious to display its attractions! It does not pine because man does not admire it. How independent on our race! It lifts its delicate spike amid the hellebore and ferns in the deep shade of the swamp. I am inclined to think of it as a relic of the past as much as the arrowhead, or the tomahawk I found on the 7th.

Ferns are four or five feet high there.

7 P. M. — Up Assabet.

The tupelo's stamens are loose and will perhaps shed pollen to-morrow or next day. It is twilight, and the river is covered with that dusty lint, as was the water next the shore at Walden this afternoon. Chimney and bank swallows are still hovering over the river, and cherry-birds fly past. The veery rings, and the tree-toad. The air is now pretty full of shad-flies, and there is an incessant sound made by the fishes leaping for

Great Fringed Orchis

such as are struggling on the surface; it sounds like the *lapsing* of a swift stream, sucking amid rocks. The fishes make a business of thus getting their evening meal, dimpling the river like large drops as far as I can see, sometimes making a loud plashing. Meanwhile the kingfishers are on the lookout for the fishes as they rise, and I saw one dive in the twilight and go off uttering his *cr-r-ack, cr-r-rack.*

The mosquitoes encircle my head and torment me, and I see a great moth go fluttering over the tree-tops and the water, black against the sky, like a bat. The fishes continue to leap by moonlight. A full moon.

Covered with disgrace, this State has sat down coolly to try for their lives the men who attempted to do its duty for it. And this is called justice! They who have shown that they can behave particularly well, — they alone are put under bonds "for their good behavior!" Such a judge and court are an impertinence. Only they are guiltless who commit the crime of contempt of such a court. It behooves every man to see that his influence is on the side of justice, and let the courts make their own characters. What is any political organization worth, when it is in the service of the devil? I see that the authorities — the Governor, Mayor, Commissioner, Marshal, etc. — are either weak or unprincipled men, — *i. e.*, well disposed but not equal to the occasion, — or else of dull moral perception, with the unprincipled and servile in their pay. All sound moral sentiment is opposed to them.

I had thought that the Governor was in some sense the executive officer of the State; that it was his busi-

ness to see that the laws of the State were executed; but, when there is any special use for him, he is useless, permits the laws to go unexecuted, and is not heard from. But the worst I shall say of the Governor is that he was no better than the majority of his constituents — he was not equal to the occasion. While the whole military force of the State, if need be, is at the service of a slaveholder, to enable him to carry back a slave, not a soldier is offered to save a citizen of Massachusetts from being kidnapped. Is this what all these arms, all this "training," has been for these seventy-eight years past? What is wanted is men of principle, who recognize a higher law than the decision of the majority. The marines and the militia whose bodies were used lately were not men of sense nor of principle; in a high moral sense they were not *men* at all.

Justice is sweet and musical to hear; but injustice is harsh and discordant. The judge still sits grinding at his organ, but it yields no music, and we hear only the sound of the handle. He believes that all the music resides in the handle, and the crowd toss him their coppers just the same as before.[1]

June 10. *Saturday.* P. M. — To Conantum on foot.

The bay-wing sparrow apparently is not my seringo, after all. What is the seringo? I see some with clear, dirty-yellow breasts, but others, as to-day, with white breasts, dark-streaked. Both have the yellow over eye and the white line on crown, and agree in size,

[1] [*Cape Cod, and Miscellanies*, pp. 391, 392, 404; *Misc.*, Riv. 175, 176, 191.] *Vide* 17th.

but I have seen only one with distinct yellow on wings. Both the last, *i. e.* except only the bay-wing, utter the seringo note. Are they both yellow-winged sparrows? or is the white-breasted with streaks the Savannah sparrow?

The meadows now begin to be yellow with senecio. Sidesaddle generally out; petals hang down, apparently a day or two. It is a conspicuous flower. The fragrance of the arethusa is like that of the lady's-slipper, or pleasanter. I see many dead painted tortoises, the bugs now devouring them, in the fields. The [*Viburnum*] *Lentago* is just out of bloom now that the *V. nudum* is fairly begun.

Saw probably a crow's nest high in a white pine, two crows with ragged wings circling high over it and me, not noisy.

June 11. *Sunday.* 8.30 A. M. — To Framingham with Mrs. Brown. All day cloudy and cool without rain.

At twelve walked up the Sudbury River above Frank's to Ashland, at first through the meadows, then over the high hills in the vicinity. The stream narrows suddenly in the middle of Framingham, probably about the outlet from Farm Pond and also Stony Brook. It is merely a large brook from a rod to a rod and a half wide, pursuing a serpentine course through meadows, still deep and dark and sluggish for the most part, and bordered with pads, thus preserving its character below. Diervilla abundant on bank of river at Frank's, out possibly yesterday. I see that red sugar incrustation on red maple leaves. Young song

sparrows have flown some days at Frank's. Prunella well out, perhaps two or three days. From a high hill on the west of the river, about a mile from Frank's, get a good view of Farm Pond eastward, which empties into the river, with South Framingham on the south-east side of it. I did not instantly detect it, the dark hills and trees being reflected in it. How agreeable in a still, cloudy day, when large masses of clouds, equally dispersed, float across the sky, not threatening rain, but preserving a temperate air, to see a sheet of water thus revealed by its reflections, a smooth, glassy mirror, reflecting the light sky and the dark and shady woods. It is very much like a mirage. I went to a pretty high hill east of and near to Ashland, where I found an abundance of ripe strawberries, earlier, I am sure, than with us. A young man picking strawberries pointed toward Hopkinton southwesterly and said that it was four miles thither straight and six to White-hall Pond (the source of the river), but a great deal farther by the river, that boats were used here at Ashland, and pouts and pickerel caught. Grape out. Saw in and near some woods four or five cow black-birds, with their light-brown heads, — their strain an imperfect, milky, gurgling *conqueree*, an unsuccess-ful effort. It made me think, for some reason, of streams of milk bursting out a sort of music between the staves of a keg. I saw a yellow-spotted tortoise come out, — undoubtedly to lay its eggs, — which had climbed to the top of a hill as much as a hundred and thirty feet above any water. A wood tortoise had just made its hole in the damp soil of Frank's garden.

Maple viburnum well out. It must come very soon after the *nudum*. The note of the cuckoo is an agreeable sound in the middle of these days. I think I saw wild radish (*Raphanus*) out, as I rode along. These days observe and admire the forms of elms.

June 12. P. M. — To Walden.

Clover now reddens the fields. Grass in its prime. Comfrey in front of Stow's well out some days apparently. With the roses now fairly begun I associate summer heats. *Galium trifidum* var. *latifolium* (?), smooth-angled, some with linear leaves. Is it *tinctorium?* Hear the evergreen-forest note, and see the bird on the top of a white pine, somewhat creeper-like, along the boughs, and golden head except a black streak from eyes, black throat, slate-colored back, forked tail, white beneath, — *er te, ter ter te.* Another bird with *yellow* throat near by may have been the other sex. Is it the golden-winged warbler? [1]

Pyrola chlorantha. Rosa lucida, probably yesterday, the 11th, judging from what I saw Saturday, *i. e.* the 10th. A bud in pitcher the 13th. The *R. nitida* is the most common now. The round-leaved cornel is well out at Heywood Peak, probably two or three days. Perhaps this and the maple-leaved viburnum are as early as the *V. nudum* and *V. dentatum,* only more rare. Scared a kingfisher on a bough over Walden. As he flew off, he *hovered* two or three times thirty or forty feet above the pond, and at last dove and apparently caught a fish, with which he flew off low over

[1] *Vide* June 17th.

the water to a tree. Mountain laurel at the pond. A narrow-leaved potamogeton well out at the bathing-place, — leaves two to three inches long. Four-leaved loosestrife.

Silene antirrhina, how long? Do I not see two birds with the seringo note, — the Savannah (?) sparrow, larger with not so bright a yellow over eye, none on wing, and white breast, and beneath former streaked with dark and perhaps a dark spot, and the smaller yellow-winged, with spot on wing also and ochreous breast and throat? The first sings *che che rar, che ra-a-a-a-a-ar.*

Sundown. — To Clamshell Hill.

Nightshade a day or two. The cracks made by cold in pastures in the winter are still quite distinct. Phleum or herd's-grass (?). I sit on the Clamshell Hill at sunset, while several kinds of swallows are playing low over it chasing each other, and occasionally alighting on the bare hillside. The level rays of the sun shine into and light up the trunk and limbs of a swamp white oak on Hubbard's meadow.

June 13. *Tuesday.* I hear a quail this morning.

2 P. M. — By boat to Bittern Cliff and so to Lee's Cliff.

I hear the muttering of thunder and see a dark cloud in the west-southwest horizon; am uncertain how far up-stream I shall get. The *Nuphar lutea* var. *Kalmiana*, apparently two or three days in *some* places; generally not yet. Its leaf appears to be the prevail-

ing pad; it is outside in the deepest water, and is smaller and narrower in proportion to its breadth than the other, with a small leaf-stem, the lobes overlapping. Now, in shallow places near the bends, the large and conspicuous spikes of the broad-leaved potamogeton rise thickly above the water. Though the plants are slanted downward by the stream, the spikes at their ends rise perpendicularly two or three inches. My boat passes over these beds of potamogetons, pressing their spikes under water. I see the yellow water ranunculus in dense fields now, in some places on the side of the stream, two or three inches above water, and many gone to seed. See a white lily bud.

The clams now lie up thickly at the Hubbard Bathing-Place, all on their edges. The small iris is budded near by. The clouds are rising up in the southwest, irregular and ragged black pillars in the form of men and bears, the northernmost with a glowing side. If it rains hard, I will run my boat ashore, turn it over, and get under it. I will not turn back; my afternoon shall not be interrupted by a thunder-shower. It is so warm that I stop to drink wherever there is a spring. The flowering fern is reddish and yellowish green on the meadows. There are bare places on the meadow, from which the surface was carried off last winter. An opposite cloud is rising fast in the east-northeast, and now the lightning crinkles down it and I hear the heavy thunder. It appears to be rising to meet the cloud in the west, and I shall surely get wet. The *Comarum palustre* well out apparently three or four

days, with its small dark and dull purple petals on a dark purplish calyx ground. I paddle slowly by farmers in small parties, busily hoeing corn and potatoes. The boy rides the horse dragging the cultivator. They have a jug of sweetened water in the grass at the end of the row. The kingbird's eggs are not yet hatched. How often I see Garfield, — Uncle Daniel, — the stout broad-shouldered farmer, taking his way through the fields toward night, toward the river, with his fish-pole and basket over his shoulder. He had on a live shiner, six or seven inches long, the other day and a cork above. He wanted to see if he "could n't catch a big pickerel." At Bittern Cliff Spring, a handsomely cut petalled geranium, the whole rather elliptical in outline. Forget the number of petals. The panicled cornel by Conant's orchard wall will open in a day or two.[1] The small veronica with minute blue flowers at Lee's Cliff, how long? *V. arvensis.* Pennyroyal is four or five inches high there.

Galium circæzans well out some days at Cliff, — the broad three-nerved four leaves. The thunder-cloud in the east has disappeared southward, and that in the west has changed to a vast black sheaf falling over on all sides at top, but [it does] not rise fast. The little globular drooping reddish buds of the *Chimaphila umbellata,* — pipsissewa, — are now very pretty. It is remarkable how much the pads are eaten already. Some water-target leaves at Walden yesterday were scored as by some literal character. I see also the

[1] Probably 14th; well out the 16th elsewhere.

leaves of a columbine with light markings, being half eaten through; and, as there are eggs beneath, it may have been done to let the light through to them. The krigia seeds and down begin to fly. The common polypody and ebony spleenwort show green fruit dots. It is remarkable how many birds' nests are broken up. At least half that I examine again have been disturbed, only the broken shells left; *viz.*, a chewink's and a brown thrasher's. The last was on the ground under a barberry bush, was six or seven inches in diameter without, of dead leaves and hay, then of small twigs, then of dark root-fibres within, — no more lining. How beautiful the solid cylinders of the lamb-kill now just before sunset, — small ten-sided, rosy-crimson basins, about two inches above the recurved, drooping dry capsules of last year, — and sometimes those of the year before are two inches lower. The first rose-bug on one of these flowers. Stopped to pick strawberries on Fair Haven. When I have stayed out thus till late many miles from home, and have heard a cricket beginning to chirp louder near me in the grass, I have felt that I was not far from home after all, — began to be weaned from my village home. There is froth on alders, which comes off on to my clothes. I see over the bream nests little schools of countless minute minnows. Can they be the young breams? The breams being still in their nests. It is surprising how thickly strewn our soil is with arrowheads. I never see the surface broken in sandy places but I think of them. I find them on all sides, not only in corn and grain and potato and bean fields, but in

pastures and woods, by woodchucks' holes and pigeon beds, and, as to-night, in a pasture where a restless cow has pawed the ground. I float homeward over water almost perfectly smooth, yet not methinks as in the fall, my sail so idle that I count ten devil's-needles resting along it at once.

Carpet-weed, and purslane, and sweet-briar.

Is not the rose-pink *Rosa lucida* paler than the *R. nitida?*

June 14. P. M. — To lime-kiln with Mr. Bacon of Natick.

Sisymbrium amphibium (?) of Bigelow, some days, at foot of Loring's land. Common mallows well out; how long? What is that sisymbrium or mustard-like plant at foot of Loring's? *Erigeron strigosus* (??) out earliest, say yesterday. Observed a ribwort near Simon Brown's barn by road, with elongated spikes and only pistillate flowers. Hedge-mustard, how long? Pepper-grass, how long? Some time. *Scirpus lacustris*, maybe some days. I see a black caterpillar on the black willows nowadays with red spots. Mr. Bacon thinks that cherry-birds are abundant where cankerworms are. Says that only female mosquitoes sting (not his observation alone); that there are one or two arbor-vitæs native in Natick. He has found the *Lygodium palmatum* there. There is one pure-blooded Indian woman there. Pearl [?], I think he called her. He thought those the exuviæ of mosquitoes on the river weeds under water.[1] Makes his own microscopes and uses garnets. He called

[1] Russell makes them many other creatures also.

the huckleberry-apple a parasitic plant, — pterospora, — which [has] grown on and changed the nature of the huckleberry. Observed a diseased *Andromeda paniculata* twig prematurely in blossom. Caught a locust, — properly harvest-fly (cicada), — drumming on a birch, which Bacon and Hill (of Waltham) think like the *septendecim*, except that ours has not red eyes but black ones. Harris's other kind, the dog-day cicada (*canicularis*), or harvest-fly. He says it begins to be heard invariably at the beginning of dog-days; he (Harris) heard it for many years in succession with few exceptions on the 25th of July. Bacon says he has seen pitch pine pollen in a cloud going over a hill a mile off; is pretty sure.

June 15. 5.30 A. M. — To Island and Hill.

A young painted tortoise on the surface of the water, as big as a quarter of a dollar, with a reddish or orange sternum. I suppose that my skater insect is the hydrometer. Found a nest of tortoise eggs, apparently buried last night, which I brought home, ten in all, — one lying wholly on the surface, — and buried in the garden. The soil *above* a dark virgin mould about a stump was unexpectedly hard.[1]

P. M. — Up Assabet to Garlic Wall.

That tall grass opposite the Merrick Swimming-Place is getting up pretty well, and blossoming with a broad and regular spike, for some time. This is the third afternoon that we have had a rumbling thunder-

[1] These were stinkpots and only a few feet from water's edge.

cloud arise in the east, — not to mention the west, — but all signs have failed hitherto, and I resolve to proceed on my voyage, knowing that I have a tight [roof] in my boat turned up. The froth on the alders, andromeda, etc., — not to speak of the aphides, — dirties and apparently spots my clothes, so that it is a serious objection to walking amid these bushes these days. I am covered with this spittle-like froth. At the Assabet Spring I must have been near a black and white creeper's nest. It kept up a constant chipping. Saw there also, probably, a chestnut-sided warbler. A yellow crown, chestnut stripe on sides, white beneath, and two yellowish bars on wings. A red oak there has many large twigs drooping withered, apparently weakened by some insect. May it not be the locust of yesterday? Black willow is now gone to seed, and its down covers the water, white amid the weeds. The swamp-pink apparently two or even three days in one place. Saw a wood tortoise, about two inches and a half, with a black sternum and the skin, which becomes orange, now ochreous merely, or brown. The little painted tortoise of the morning was red beneath. Both these young tortoises have a distinct dorsal ridge. The garlic not in flower yet. I observed no *Nuphar lutea* var. *Kalmiana* on the Assabet.

7 P. M. — To Cliff by railroad.

Cranberry. *Prinos lævigatus*, apparently two days. Methinks the birds sing a little feebler nowadays. The note of the bobolink begins to sound somewhat rare. The sun has set, or is at least concealed in a low

mist. As I go up Fair Haven Hill, I feel the leaves in the sprout-land oak, hickory, etc., cold and wet to my hand with the heavy dew that is falling. They look dry, but when I rub them with my hand, they show moist or wet at once. Probably I thus spread minute drops of dew or mist on their surface. It cannot be the warmth of my hand, for when I breathe on them it has no effect. I see one or two early blueberries prematurely turning. The *Amelanchier Botryapium* berries are already reddened two thirds over, and are somewhat palatable and soft, — some of them, — not fairly ripe.

June 16. 5 A. M. — Up railroad.

As the sun went down last night, round and red in a damp misty atmosphere, so now it rises in the same manner, though there is no dense fog. Poison-dogwood yesterday, or say day before, *i. e.* 14th. *Rubus hispidus*, perhaps yesterday in the earliest place, over the sand. Mullein, perhaps yesterday.

Observed yesterday the erigeron with a purple tinge. I cannot tell whether this, which seems in other respects the same with the white, is the *strigosus* or *annuus*. The calla which I plucked yesterday sheds pollen to-day; say to-day, then. A *Hypericum perforatum* seen last night will probably open to-day. I see on the *Scirpus lacustris* and pontederia leaves black patches for some days, as if painted, of minute closely placed ova, above water. I suspect that what I took for milfoil is a sium. Is not that new mustard-like plant behind Loring's, and so on down the river, *Nasturtium hispidum*, or hairy cress? Probably the first the 19th.

Heart-leaf. *Nymphæa odorata.* Again I scent the white water-lily, and a season I had waited for is arrived. How indispensable all these experiences to make up the summer! It is the emblem of purity, and its scent suggests it. Growing in stagnant and muddy [water], it bursts up so pure and fair to the eye and so sweet to the scent, as if to show us what purity and sweetness reside in, and can be extracted from, the slime and muck of earth. I think I have plucked the first one that has opened for a mile at least. What confirmation of our hopes is in the fragrance of the water-lily! I shall not so soon despair of the world for it, notwithstanding slavery, and the cowardice and want of principle of the North. It suggests that the time may come when man's deeds will smell as sweet. Such, then, is the odor our planet emits. Who can doubt, then, that Nature is young and sound? If Nature can compound this fragrance still annually, I shall believe her still full of vigor, and that there is virtue in man, too, who perceives and loves it. It is as if all the pure and sweet and virtuous was extracted from the slime and decay of earth and presented thus in a flower. The resurrection of virtue! It reminds me that Nature has been partner to no Missouri compromise. I scent no compromise in the fragrance of the white water-lily. In it, the sweet, and pure, and innocent are wholly sundered from the obscene and baleful. I do not scent in this the time-serving irresolution of a Massachusetts Governor, nor of a Boston Mayor. All good actions have contributed to this fragrance. So behave that the odor of your actions may enhance the general sweetness of the

atmosphere, that, when I behold or scent a flower, I may not be reminded how inconsistent are your actions with it; for all odor is but one form of advertisement of a moral quality. If fair actions had not been performed, the lily would not smell sweet. The foul slime stands for the sloth and vice of man; the fragrant flower that springs from it, for the purity and courage which springs from its midst. It is these sights and sounds and fragrances put together that convince us of our immortality. No man believes against all evidence. Our external senses consent with our internal. This fragrance assures me that, though all other men fall, one shall stand fast; though a pestilence sweep over the earth, it shall at least spare one man. The genius of Nature is unimpaired. Her flowers are as fair and as fragrant as ever.[1]

Three days in succession, — the 13th, 14th, and 15th, — thunder-clouds, with thunder and lightning, have risen high in the east, threatening instant rain, and yet each time it has failed to reach us, and thus it is almost invariably, methinks, with thunder-clouds which rise in the east; they do not reach us. Perhaps they are generated along, and confined to, the seacoast.

The warmer, or at least *drier*, weather has now prevailed about a fortnight. Once or twice the sun has gone down red, shorn of his beams. There have been showers all around us, but nothing to mention here yet. Yet it is not particularly dry. I hear nowadays the anxious notes of some birds whose young have just flown, — crow blackbirds, etc., etc.

[1] [*Cape Cod, and Miscellanies*, pp. 407, 408; *Misc.*, Riv. 195, 196.]

As for birds, I think that their quire begins now to be decidedly less full and loud. I hear the phœbe note of the chickadee occasionally. I see only a stray, probably summer, duck very rarely on the river. The bluebird is lost and somewhat rare-looking. The quail begins to be *heard*. Very few if any hawks are commonly noticed. The cow troopials have [been] seen in small flocks flitting about within a week. Along low roads, the song sparrows, bay-wings, Savannah (?), and yellow-winged (?) (*i. e.* ochreous-throated) quite commonly sing. Woodpeckers not noticeable as in spring. Rush sparrow at sundown. Methought I heard a pine warbler to-day. Many chip-birds have flown. The blue herons appear not to remain here this summer, and wood thrushes are not so numerous within my range as formerly. Kingfishers quite common, perhaps especially at Walden, where the water is clear, and on the Assabet. The black and white creeper sings much. The pine warbler, as usual, and the evergreen-forest note (golden-winged (?) warbler). Thrasher and catbird sing still; summer yellowbird and Maryland yellow-throat sing still; and oven-bird and veery. The bobolink, full strains, but further between. The red-eye incessant at midday. Goldfinches twitter over as usual. The wood pewee prominent. The nighthawk in full blast. Cherry-birds numerous, — the bold, combative-looking fellows, — etc., etc.

Since spring — say for a month or so — we have had no *tumultuous* water, — waves running with whitecaps.

Caterpillars have some time been grown on apple and cherry trees, and now the trees are leafing again.

Other caterpillars on oaks, black willows, etc. Dragonflies of various sizes and colors are now extremely abundant, hovering just over the surface of the river and coupling there, — a blue and brown or a blue and green one united. Alighting on the least surface of a weed. One kind of cicada, at least, began a fortnight ago, — a sort of black-eyed *septendecim*. Shad-flies are *probably* disappearing. *Great* moths now abroad. Rose-bugs have just come. Various plants are frothy.

Tortoises, of all kinds, as I have seen, but *odoratus*, are laying their eggs for some time. I find their eggs dropped. Apparently young breams over nests. Frog-spawn apparently, in river; stringy, ash-color.

The effect of a good government is to make life more valuable, — of a bad government, to make it less valuable. We can afford that railroad and all merely material stock should depreciate, for that only compels us to live more simply and economically; but suppose the value of life itself should be depreciated. Every man in New England capable of the sentiment of patriotism must have lived the last three weeks with the sense of having suffered a vast, indefinite loss. I had never respected this government, but I had foolishly thought that I might manage to live here, attending to my private affairs, and forget it. For my part, my old and worthiest pursuits have lost I cannot say how much of their attraction, and I feel that my investment in life here is worth many per cent. less since Massachusetts last deliberately and forcibly restored an innocent man, Anthony Burns, to slavery. I dwelt before in the illusion that my life passed somewhere

only *between* heaven and hell, but now I cannot persuade myself that I do not dwell wholly within hell. The sight of that political organization called Massachusetts is to me morally covered with scoriæ and volcanic cinders, such as Milton imagined. If there is any hell more unprincipled than our rulers and our people, I feel curious to visit it. Life itself being worthless, all things with it, that feed it, are worthless. Suppose you have a small library, with pictures to adorn the walls, — a garden laid out around, — and contemplate scientific and literary pursuits, etc., etc., and discover suddenly that your villa, with all its contents, is located in hell, and that the justice of the peace is one of the devil's angels, has a cloven foot and a forked tail, — do not these things suddenly lose their value in your eyes? Are you not disposed to sell at a great sacrifice?

I feel that, to some extent, the State has fatally interfered with my just and proper business. It has not merely interrupted me in my passage through Court Street on errands of trade, but it has, to some extent, interrupted me and every man on his onward and upward path, on which he had trusted soon to leave Court Street far behind. I have found that hollow which I had relied on for solid.

I am surprised to see men going about their business as if nothing had happened, and say to myself, "Unfortunates! they have not heard the news;" that the man whom I just met on horseback should be so earnest to overtake his newly bought cows running away, — since all property is insecure, and if they do not

run away again, they may be taken away from him when he gets them. Fool! does he not know that his seed-corn is worth less this year, — that all beneficent harvests fail as he approaches the empire of hell? No prudent man will build a stone house under these circumstances, or engage in any peaceful enterprise which it requires a long time to accomplish. Art is as long as ever, but life is more interrupted and less available for a man's proper pursuits. It is time we had done referring to our ancestors. We have used up all our inherited freedom, like the young bird the albumen in the egg. It is not an era of repose. If we would save our lives, we must fight for them.

The discovery is what manner of men your countrymen are. They steadily worship mammon — and on the seventh day curse God with a tintamarre from one end of the *Union* to the other. I heard the other day of a meek and sleek devil of a Bishop Somebody, who commended the law and order with which Burns was given up. I would like before I sit down to a table to inquire if there is one in the company who styles himself or is styled Bishop, and he or I should go out of it. I would have such a man wear his bishop's hat and his clerical bib and tucker, that we may know him.

Why will men be such fools as [to] trust to lawyers for a *moral* reform? I do not believe that there is a judge in this country prepared to decide by the principle that a law is immoral and therefore of no force. They put themselves, or rather are by character, exactly on a level with the marine who discharges his

musket in any direction in which he is ordered. They are just as much tools, and as little men.[1]

P. M. — To Baker Ditch *via* almshouse.

Autumnal dandelion, some time, in Emerson's meadow pasture. *Potentilla Norvegica*, a day or two, in low ground; very abundant at Baker Ditch with other weeds, on a cleared and ditched swamp. Veiny-leaved hawkweed at Heywood Peak appears shut up at midday, — also the autumnal dandelion. A veiny-leaved hawkweed without veins. Is not this my *Gronovii?*[2] Panicled cornel well out on Heywood Peak.

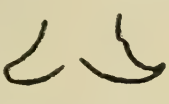
There is a cool east wind, — and has been afternoons for several days, — which has produced a very thick haze or a fog. I find a tortoise egg on this peak at least sixty feet above the pond. There is a fine ripple and sparkle on the pond, seen through the mist. But what signifies the beauty of nature when men are base? We walk to lakes to see our serenity reflected in them. When we are not serene, we go not to them. Who can be serene in a country where both rulers and ruled are without principle? The remembrance of the baseness of politicians spoils my walks. My thoughts are murder to the State; I endeavor in vain to observe nature; my thoughts involuntarily go plotting against the State. I trust that all just men will conspire.[3]

[1] [*Cape Cod, and Miscellanies*, pp. 401, 402, 405–407; *Misc.*, Riv. 187–189, 192–194.]

[2] Think not. *Vide* forward, July 1st.

[3] [*Cape Cod, and Miscellanies*, p. 407; *Misc.*, Riv. 195.]

Dogsbane, apparently to-morrow. I observed yesterday that the *Viburnum dentatum* was very conspicuous and prevalent along the river, as if few other flowers were in bloom.

An abundance of *Galium trifidum* in low grounds, some smooth, some rough, with four leaves, or five or six; I do not distinguish the varieties. Am in doubt whether the polygonum which I find just opening at the ditch (say to-morrow) is *sagittatum* — a rank one — or *arifolium*.[1] The lobes of the leaves do not spread thus :  but are: Three or four styles and four or five angled pods. Epilobium, probably *coloratum*, yet rather downy, to-morrow. It is worth the while to see the rank weeds which grow here on this cleared and ditched swamp, — *Potentilla Norvegica*, touch-me-not, *Polygonum sagittatum* (?), nightshade, etc., etc. The *Rosa nitida* grows along the edge of the ditches, the half-open flowers showing the deepest rosy tints, so glowing that they make an evening or twilight of the surrounding afternoon, seeming to stand in the shade or twilight. Already the bright petals of yesterday's flowers are thickly strewn along on the black mud at the bottom of the ditch.

The *R. nitida*, the earlier (?), with its narrow shiny leaves and prickly stem and its moderate-sized rose-pink petals.

The *R. lucida*, with its broader and duller leaves, but larger and perhaps deeper-colored and more purple

[1] ["Yes" is inserted after *sagittatum*, "or *arifolium*" is crossed out, and "*Vide* Aug. 19" follows.]

petals, perhaps yet higher scented, and its great yellow centre of stamens.

The smaller, lighter, but perhaps more delicately tinted *R. rubiginosa.*

One and all drop their petals the second day. I bring home the buds of the three ready to expand at night, and the next day they perfume my chamber. Add to these the white lily (just begun), also the swamp-pink, and probably morning-glory, and the great orchis, and mountain laurel (now in prime), and perhaps we must say that the fairest flowers are now to be found. Or say a few days later. (The arethusa is disappearing.)

It is eight days since I plucked the great orchis; one is perfectly fresh still in my pitcher. It may be plucked when the spike is only half opened, and will open completely and keep perfectly fresh in a pitcher more than a week. Do I not live in a garden, — in paradise? I can go out each morning before breakfast — I do — and gather these flowers with which to perfume my chamber where I read and write, all day. The note of the cherry-bird is fine and ringing, but peculiar and very noticeable. With its crest it is a resolute and combative-looking bird. The mountain laurel is remarkable for its great dense and naked (for it runs to flower now) corymbs of large and handsome flowers. And this is a prevailing underwood on many of our mountainsides! Perhaps it is more appreciated in this neighborhood, where it is comparatively rare, — rare as poetry. Whitest in the shade. Meadow-sweet to-morrow.

June 17. *Saturday.* 5 A. M. — To Hill.

A cold fog. These mornings those who walk in grass are thoroughly wetted above mid-leg. All the earth is dripping wet. I am surprised to feel how warm the water is, by contrast with the cold, foggy air. The frogs seem glad to bury themselves in it. The dewy cobwebs are very thick this morning, little napkins of the fairies spread on the grass. Whorled utriculars. A potamogeton off Dodd's with fine, grassy, thread-like leaves and stems (somewhat flattish), and small globular spikes, maybe some time? *Ranunculus reptans*, maybe a day or more. A duck, probably wood duck, which is breeding here. From the Hill I am reminded of more youthful mornings, seeing the dark forms of the trees eastward in the low grounds, partly within and against the shining white fog, the sun just risen over it. The mist fast rolling away eastward from them, their tops at last streaking the mist and dividing it into vales. All beyond them a submerged and unknown country, as if they grew on the seashore. Why does the fog go off always toward the sun, — is seen in the east when it has disappeared in the west? The waves of the foggy ocean divide and flow back for us Israelites of a day to march through. I hear the half-suppressed guttural sounds of a red squirrel on a tree; at length he breaks out into a sharp bark.

Slavery has produced no sweet-scented flower like the water-lily, for its flower must smell like itself. It will be a carrion-flower.[1]

[1] [*Cape Cod, and Miscellanies*, p. 408; *Misc.*, Riv. 19.]

Saw the sun reflected up from the Assabet to the hill-top, through the dispersing fog, giving to the water a peculiarly rippled, pale-golden hue, — "gilding pale streams with heavenly alchemy."

The judges and lawyers, and all men of expediency, consider not whether the Fugitive Slave Law is right, but whether it is what they call constitutional. They try the merits of the case by a very low and incompetent standard. Pray, is virtue constitutional, or vice? Is equity constitutional, or iniquity? It is as impertinent, in important moral and vital questions like this, to ask whether a law is constitutional or not, as to ask whether it is profitable or not. They persist in being the servants of man, and the worst of men, rather than the servants of God. Sir, the question is not whether you or your grandfather, seventy years ago, entered into an agreement to serve the devil, and that service is not accordingly now due; but whether you will not now, for once and at last, serve God, — in spite of your own past recreancy or that of your ancestors, — and obey that eternal and only just Constitution which he, and not any Jefferson or Adams, has written in your being. Is the Constitution a thing to live by? or die by? No, as long as we are alive we forget it, and when we die we have done with it. At most it is only to swear by. While they are hurrying off Christ to the cross, the ruler decides that he cannot *constitutionally* interfere to save him. The Christians, now and always, are they who obey the higher law, who discover it to be according to their constitution to interfere. They at least cut off the ears of the police; the others pocket the

thirty pieces of silver. This was meaner than to crucify Christ, for he could better take care of himself.[1]

P. M. — To Walden and Cliffs *via* almshouse.

Rumex obtusifolius (?), maybe some days. The evergreen-forest bird at old place in white pine and oak tops, top of Brister's Hill on right. I think it has black wings with white bars. Is it not the black-throated green warbler? The unmistakable tanager sits on the oaks at midday and sings with a *hoarse* red-eye note, *pruit, prewee, prewa, prear, preā* (often more notes), some of the latter notes clearer, without the *r*. It does not sing so continuously as the red-eye, but at short intervals repeats its half-dozen notes. *Iris Virginica* well out at Peltandra Meadow, probably a day or two, though not yet at Arum Meadow. The sorrel-fields are now turning brown.

Another remarkably hazy day; our view is confined, the horizon near, no mountains; as you look off only four or five miles, you see a succession of dark wooded ridges and vales filled with mist. It is dry, hazy June weather. We are more of the earth, farther from heaven, these days. We live in a grosser element. We [are] getting deeper into the mists of earth. Even the birds sing with less vigor and vivacity. The season of hope and promise is past; already the season of small fruits has arrived. The Indian marked the midsummer as the season when berries were ripe. We are a little saddened, because we begin to see the interval between our hopes and their fulfillment. The prospect

[1] [*Cape Cod, and Miscellanies*, pp. 401, 402; *Misc.*, Riv. 188.]

of the heavens is taken away, and we are presented only with a few small berries. Before sundown I reached Fair Haven Hill and gathered strawberries. I find beds of large and lusty strawberry plants in sprout-lands, but they appear to run to leaves and bear very little fruit, having spent themselves in leaves by the time the dry weather arrives. It is those still earlier and more stinted plants which grow on dry uplands that bear the *early* fruit, formed before the droughts. But the meadows produce both leaves and fruit.

I begin to see the flowering fern at a distance in the river meadows. Butter-and-eggs, some days perhaps; one or two well out, while the rest show no forwardness. Tephrosia well out, apparently some days. Lupines are going to seed. Morning-glory, apparently yesterday. Well named morning-glory. Its broad, bell- and trumpet-shaped flowers, faintly tinged with red, are like the dawn itself. The new pitcher-plant leaf is formed in some places, now free from insects. Pogonia, *perhaps* a day or two.

The sun goes down red again, like a high-colored flower of summer. As the white and yellow flowers of spring are giving place to the rose, and will soon to the red lily, etc., so the yellow sun of spring has become a red sun of June drought, round and red like a midsummer flower, production of torrid heats.

Massachusetts sits waiting his decision, as if the crime were not already committed. The crime consists first of all and chiefly in her permitting an innocent man to be tried for more than his life, — for his

liberty. They who talk about Mr. Loring's decision, and not about their own and the State's consenting that he shall be the umpire in such a case, waste time in words and are weak in the head, if not in the heart alone [*sic*].[1]

(June 9th, continued.) — The amount of it is, if the majority vote the devil to be God, the minority will live and behave accordingly, and obey the successful candidate, trusting that some time or other, by some Speaker's casting-vote, they may reinstate God again. Some men act as if they believed that they could safely slide down-hill a little way, — or a good way, — and would surely come to a place, by and by, whence they could slide up again. This is *expediency*, or choosing that course which offers the fewest obstacles to the feet (of the slider). But there is no such thing as accomplishing a moral reform by the use of expediency or policy. There is no such thing as sliding up-hill. In morals the only sliders are backsliders.

Let the judge and the jury, and the sheriff and the jailer, cease to act under a corrupt government, — cease to be tools and become men.

Certainly slavery, and all vice and iniquity, have not had power enough to create any flower thus annually to charm the senses of men. It has no life. It is only a constant decaying and a death, offensive to all healthy nostrils. The unchangeable laws of the universe, by a partial obedience to which even sin in a measure succeeds, are all on the side of the just and fair. It is his few good qualities misallied which

[1] [*Cape Cod, and Miscellanies*, p. 393; *Misc.*, Riv. 178.]

alone make the slaveholder at all to be feared; it is because he is in some respects a better man than we.

Why, who are the real opponents of slavery? The slaveholders know, and I know. Are they the governors, the judges, the lawyers, the politicians? Or are they Garrison, Phillips, Parker & Co.? The politicians do now, and always will, instinctively stand aloof from such.

And at this very time I heard the sound of a drum in our streets. There were men or boys training; and for what? With an effort I could pardon the cocks for crowing still, for they had not been beaten that morning; but I could not excuse this rubadub of the trainers.[1]

June 18. *Sunday.* P. M. — To climbing fern.

The tephrosia is interesting for the contrast of yellowish or cream-color with red. On every dry or sandy bank I see the curled egg-shells of tortoises, which the skunks have sucked. The *Rosa lucida* is pale and low on dry sunny banks like that by Hosmer's pines. The leaves of what I call *Rumex obtusifolius* are now lighter green and broader and less curled and, I think, shorter-petioled than those of the curled dock, and the root is not yellow but white at core. The great water (?) dock, with its broad but pointed leaves, is just beginning to be obvious. The flowering fern seed ripe, probably [a] good while in some places. There are many strawberries this season, in meadows now,

[1] [*Cape Cod, and Miscellanies*, pp. 392, 402, 408; *Misc.*, Riv. 176, 189, 196.]

just fairly begun there. The meadows, like this Nut Meadow, are now full of the taller grasses, just beginning to flower, and the graceful columns of the rue (*Thalictrum*), not yet generally in flower, and the large tree- or shrub-like archangelica, with its great umbels, now fairly in bloom along the edge of the brook.

What we want is not mainly to colonize Nebraska with free men, but to colonize Massachusetts with free men, — to be free ourselves. As the enterprise of a few individuals, that is brave and practical; but as the enterprise of the State, it is cowardice and imbecility. What odds where we squat, or how much ground we cover? It is not the soil that we would make free, but men.

As for asking the South to grant us the trial by jury in the case of runaway slaves, it is as if, seeing a righteous man sent to hell, we should run together and petition the devil first to grant him a trial by jury, forgetting that there is another power to be petitioned, that there is another law and other precedents.

Am surprised to find the *Cirsium horridulum*, or great yellow thistle, out, some already withering, turned a dark purple, possibly a week old.

I discover that J. Dugan found the eggs of my snapping turtle of June 7th, apparently the same day. It did not go to a new place then, after all. I opened the nest to-day. It is, perhaps, five or six rods from the brook, in the sand near its edge. The surface had been disturbed over a foot and a half in diameter

and was *slightly* concave. The nest commenced five inches beneath, and at its neck was two and a half inches across and from this nearly four inches deep,

and swelled out below to four inches in width; shaped like a short, rounded bottle with a broad mouth; and the surrounding sand was quite firm. I took out forty-two eggs, close packed, and Dugan says he had previously broken one, which made forty-three.[1] They are a dirty white and spherical, a little more than one and one sixteenth inches in diameter, — soft-shelled, so that my finger left a permanent dimple in them. It was now ten days since they had been laid, and a little more than one half of each was darker-colored (probably the lower half) and the other white and dry-looking. I opened one, but could detect no organization with the unarmed eye. The halves of the shell, as soon as emptied, curled up, as we see them where the skunks have sucked them. They must all have been laid at one time. If it were not for the skunks, and probably other animals, we should be overrun with them. Who can tell how many tortoise eggs are buried thus in this small desert?

Observed in two places golden-crowned thrushes, near whose nests I must have been, hopping on the lower branches and in the underwood, — a somewhat sparrow-like bird, with its golden-brown crest and

[1] Daniel Foster says he found forty-two this summer, in a nest in his field in Princeton.

white circle about eye, carrying the tail somewhat like a wren, and inclined to run along the branches. Each had a worm in its bill, no doubt intended for its young. That is the chief employment of the birds now, gathering food for their young. I think I heard the anxious peep of a robin whose young have just left the nest.

Examined, as well as I could with the glass, what I will call the *tweezer*-bird, — *tra-wee, shreea-shre*, — raspingly. I have heard [it] perhaps as long as the evergreen-forest. It is a slender, somewhat small, vireo-like bird, yellow and yellowish all beneath, except a chestnutish (?) crescent on breast, with apparently a white spot on the wing, and certainly a yellow or greenish-yellow back between wings. Keeping rather high in the trees, I could not see the general color of the upper parts, but thought it was dark olivaceous or maybe slaty. Can it be the blue yellow-back warbler? [1]

Small grasshoppers very abundant in some dry grass. I find the lygodium, a late fern, now from a foot to eighteen inches high and not yet flower-budded or the leaves fully expanded. *Platanthera flava* at the Harrington Bathing-Place, possibly yesterday, — an unimportant yellowish-green spike of flowers. A large fresh stone-heap eight or ten inches above water just below there, — quite sharp, like Teneriffe. *Aralia hispida. Typha latifolia* may have shed pollen two or three days. I am surprised at the abundance of its sulphur-like pollen, on the least jar covering my

[1] Probably is. *Vide* May 7, 1855.

hands and clothes, — green; at least it does not burn. The female part of the spike green and solid and apparently *immature*. *Epilobium angustifolium* up railroad, this end of high wood.

Another round red sun of dry and dusty weather to-night, — a red or red-purple helianthus. Every year men talk about the dry weather which has now begun as if it were something new and not to be expected.

Often certain words or syllables which have suggested themselves remind me better of a bird's strain than the most elaborate and closest imitation. Heard young partridges.

It is not any such free-soil party as I have seen, but a free-man party, — *i. e.* a party of free men, — that is wanted. It is not any politicians, even the truest and soundest, but, strange as it may sound, even godly men, as Cromwell discovered, who are wanted to fight this battle, — men not of policy but of probity. Politicians! I have looked into the eyes of two or three of them, but I saw nothing there to satisfy me. They will vote for my man to-morrow if I will vote for theirs to-day. They will whirl round and round, not only horizontally like weathercocks, but vertically also.

My advice to the State is simply this: to dissolve her union with the slaveholder instantly. She can find no respectable law or precedent which sanctions its continuance. And to each inhabitant of Massachusetts, to dissolve his union with the State, as long as she hesitates to do her duty.[1]

[1] [*Cape Cod, and Miscellanies*, p. 403; *Misc.*, Riv. 190.]

June 19. *Monday.* P. M. — Up Assabet.

A thunder-shower in the north. Will it strike us? How impressive this artillery of the heavens! It rises higher and higher. At length the thunder seems to roll quite across the sky and all round the horizon, even where there are no clouds, and I row homeward in haste. How by magic the skirts of the cloud are gathered about us, and it shoots forward over our head, and the rain comes at a time and place which baffles all our calculations! Just before it the swamp white oak in Merrick's pasture was a very beautiful sight, with its rich shade of green, its top as it were incrusted with light. Suddenly comes the gust, and the big drops slanting from the north, and the birds fly as if rudderless, and the trees bow and are wrenched. It comes against the windows like hail and is blown over the roofs like steam or smoke. It runs down the large elm at Holbrook's and shatters the house near by. It soon shines in silver puddles in the streets. This the first rain of consequence for at least three weeks.

Amelanchier berries now generally reddening. Methinks the *Botryapium* has broader, more ovate, often rounded and pointed leaves, the calyx-lobes recurved on the fruit, while the *oblongifolia* is inclined to obovate and narrower leaves and erect calyx-lobes. Flowering raspberry, perhaps yesterday.

Men may talk about measures till all is blue and smells of brimstone, and then go home and sit down and expect their measures to do their duty for them. The only measure is integrity and manhood.

June 20. *Tuesday.* Motherwort to-morrow. Elder. A cloud of minute black pollywogs in a muddy pool. I see where the crickets are eating the wild strawberries.

P. M. — To Shad-bush Meadow.

Heard a *new* bird — *chut-cheeter-varrer-chutter-wit* — on the low bushes, about the size of Wilson's thrush apparently. Apparently olivaceous (?) above, most so on head, yellow front, dark bill, dark wings with two white bars, all yellow or yellowish breast and beneath. Perhaps never heard it before. Cow-wheat, apparently two or three days. A three-leaved *Lysimachia stricta* apparently, with reddish flower-buds, not open. Shad-berries almost, but scarce. There seems to be much variety in the *Rosa lucida*, — some to have stouter hooked prickles than the *R. Carolina*. Upland haying begun, or beginning. Common nettle.

June 21. *Wednesday.* We have had thick fog, and rain fell through it this morning.

P. M. — To Walden, etc.

Mitchella in Deep Cut woods, probably a day or two. Its scent is agreeable and refreshing, between the mayflower and rum cherry bark, or like peach-stone meats. *Pyrola secunda* at Laurel Glen, a day or two (?). A third of the spike now out. Most hieraciums (*venosum*) are shut by day; some open this cloudy afternoon. When I see the dense, shady masses of weeds about water, — already an unexplorable maze, — I am struck with the contrast between this and the spring, [when] I wandered about in search of the first faint greenness along the borders of the brooks.

Then an inch or two of green was something remarkable and obvious afar. Now there is a dense mass of weeds along the waterside, where the muskrats lurk, and overhead a canopy of leaves conceals the birds and shuts out the sun. It is hard to realize that the seeds of all this growth were buried in that bare, frozen earth.

The glyceria is budded and drooping at the pond, but hardly in flower.

In the little meadow pool, or bay, in Hubbard's shore, I see two old pouts tending their countless young close to the shore. The former are slate-colored. The latter are about half an inch long and very black, forming a dark mass from eight to twelve inches in diameter. The old are constantly circling around them, — over and under and *through*, — as if anxiously endeavoring to keep them together, from time to time moving off five or six feet to reconnoitre. The whole mass of the young — and there must be a thousand of them at least — is incessantly moving, pushing forward and stretching out. Are often in the form of a great pout, apparently keeping together by their own instinct chiefly, now on the bottom, now rising to the top. Alone they might be mistaken for pollywogs. The old, at any rate, do not appear to be very successful in their apparent efforts to communicate with and direct them. At length they break into four parts. The old are evidently very careful parents. One has some wounds apparently. In the second part of the story of Tanner it is said: "*Ah-wa-sis-sie* — Little catfish. The Indians say this fish hatches its young in a hole in the mud, and that they accompany

her for some time afterwards." Yet in Ware's Smellie it is said that fishes take no care of their young. I think also that I see the young breams in schools hovering over their nests while the old are still protecting them.

I see two varieties of *Galium trifidum*, apparently equally early, one smooth, the other rough; sometimes it grows in very dense tufts. Peltandra well out, apparently yesterday; quite abundant and pretty, raised two or three inches above the water. *Prinos verticillatus*, possibly yesterday. *Hypericum ellipticum*. Eriocaulon. Partridges drum still. The effect of the pond on its shore while standing at a great height is remarkable. Though considerably lower than it was, it appears much higher in some places, where it has worn away a barrier between itself and a meadow and so made the water deeper there.

Rambled up the grassy hollows in the sprout-lands north (?) of Goose Pond. I felt as if in a strange country, — a pleasing sense of strangeness and distance. Here, in the midst of extensive sprout-lands, are numerous open hollows more or less connected, where for some reason [1] the wood does not spring up, — and I am glad of it, — filled with a fine wiry grass, with the panicled andromeda, which loves dry places, now in blossom around the edges, and small black cherries and sand cherries straggling down into them. The woodchuck loves such places and now wabbles off with a peculiar loud squeak like the sharp bark of a red squirrel, then stands erect at the entrance of his

[1] Maybe frosts.

hole, ready to dive into it as soon as you approach. As wild and strange a place as you might find in the unexplored West or East. The quarter of a mile of sprout-land which separates it from the highway seems as complete a barrier as a thousand miles of earth. Your horizon is there all your own.

Indigo, apparently a day in *some* places. Calopogon a day or two at least in Hubbard's Close, — this handsomest of its family after the arethusa. Again I am attracted by the deep scarlet of the wild moss rose half open in the grass, all glowing with rosy light.

June 23. Friday. There has been a foggy haze, dog-day-like, for perhaps ten days, more or less. To-day it is so cold that we sit by a fire. A little skunk, a quarter or a third grown, at the edge of the North River, under hill. Birds do not sing this afternoon, though cloudy, as they did a month ago. I think they are most lively about the end of May.

P. M. — Walden and Cliffs.

I see by the railroad causeway young barn swallows on the fences learning to fly. Lactuca, maybe a day or two, but the heads not upright yet. Whiteweed now for three weeks has frosted the fields like snow; getting old. *Polygonum Convolvulus.* Wool-grass tops. *Pyrola rotundifolia* in cut woods to-morrow. A black snake in Abel Brooks's wood [?], on a warm dry side of it, his head concealed in a stump, rapidly vibrating his tail, which struck upon the leaves. Five feet one inch long; uniform coal-black above, with greenish coaly reflections; bluish or slaty beneath;

white beneath head; about 189 abdominal plates; tail more than one foot long and slender. When the head was dead, exerted great power with its body; could hardly hold it.

Early blueberries have begun on the Brown sprout-land, Fair Haven. This the third summer since the woods were cut, and the first for any quantity of berries, I think; so of Heywood's lot on Walden, which I think was cut also in '51–'52.

Lysimachia stricta, perhaps yesterday, at Lincoln bound, Walden. After one or two cold and rainy days the air is now clearer at last. From the Cliffs the air is beautifully clear, showing the glossy and light-reflecting greenness of the woods. It is a great relief to look into the horizon. There is more room under the heavens. Specularia, handsome, dark-purple, on Cliffs, how long? Disturbed three different broods of partridges in my walk this afternoon in different places. One in Deep Cut Woods, big as chickens ten days old, went flying in various directions a rod or two into the hillside. Another by Heywood's meadow, the young two and a half inches long only, not long hatched, making a fine peep. Held one in my hand, where it squatted without winking. A third near Well Meadow Field. We are now, then, in the very midst of them. Now leading forth their young broods. The old bird will return mewing and walk past within ten feet.

June 25. P. M. — To Assabet Bathing-Place and Derby Bridge.

Mayweed, say 27th. At Ludwigia Poke-logan, a cinder-like spawn in a white, frothy jelly. A green bittern, apparently, awkwardly alighting on the trees and uttering its hoarse, *zarry* note, *zskeow-xskeow-xskeow*. Shad-berry ripe. Garlic open, eighteen inches high or more. The calla fruit is curving down. I observe many kingfishers at Walden and on the Assabet, very few on the dark and muddy South Branch. *Asclepias* (the mucronate-pointed, what ?) yesterday. A raspberry on sand by railroad, ripe. Through June the song of the birds is gradually growing fainter. *Epilobium coloratum*, railroad above red house unless the one observed some time ago was a downy *coloratum*, with *lanceolate* leaves. *Trifolium arvense*.

June 26. *Monday*. P. M. — Up river to Purple Utricularia Shore.

Cornus sericea, yesterday at least. Small front-rank polygonum, a smut-like blast in the flower. Small form of arrowhead in Hubbard's aster meadow, apparently several days. I am struck, as I look toward the Dennis shore from the bathing-place, with the peculiar agreeable dark shade of June, a clear air, and bluish light on the grass and bright silvery light reflected from fresh green leaves. *Sparganium*, apparently *ramosum*, two or three days. The largest apparently the same, but very rarely in blossom; found one, however, with a branched scape, but not concave leaves except below. *Gratiola*. *Cicuta maculata*, apparently to-morrow.

June 27. P. M. — Cliffs *via* Hubbard meadow.

Smooth sumach [1] at Texas house, two days. Hellebore in full bloom; how long? For the most part does not bloom. *Polygonum sagittatum* probably also some time at Baker Swamp. *Œnothera biennis*, two or more days. *Scutellaria galericulata*, to-morrow. *Polygonum Persicaria*. *Marchantia polymorpha*. Hydrocotyle, a day or two in Potter's field near Corner road by apple tree. Blueberries pretty numerously ripe on Fair Haven. P. Hutchinson says that he can remember when haymakers from Sudbury, thirty or forty years ago, used to come down the river in numbers and unite with Concord to clear the weeds out of the river in shallow places and the larger streams emptying in. The three lecheas show reddish and flower-like at top, — the second of Gray apparently a little the most forward.

June 28. A. M. — To Island.

Tall anemone. Pontederia to-morrow.

A thunder-shower in the afternoon.

June 29. Another clear morning after last evening's rain.

P. M. — To lime-kiln.

Spurry, a good while. Cichorium at Simon Brown's, three or four days (early); also catnep, about two days. Canada thistle, yesterday. Earliest cultivated cherries, a week ago. Hazelnut burs now make a show. *Veronica serpyllifolia* still. The cherry-bird's note is like the fine peep of young partridges or woodcocks.

[1] Probably staghorn; smooth not for a week probably.

All the large black birches on Hubbard's Hill have just been cut down, — half a dozen or more. The two largest measure two feet seven inches in diameter on the stump at a foot from the ground; the others, five or six inches less. The inner bark there about five eighths of an inch.

June 30. P. M. — Walden and Hubbard's Close.

Jersey tea. Young oak shoots have grown from one and a half to three or four feet, but now in some cases appear to be checked and a large bud to have formed. Poke, a day or two. Small crypta Elatine, apparently some days at least, at Callitriche Pool. *Rubus triflorus* berries, some time, — the earliest fruit of a rubus. The berries are very scarce, light (wine?) red, semitransparent, showing the seed, — a few (six to ten) large shining grains and rather acid. *Lobelia spicata*, to-morrow.

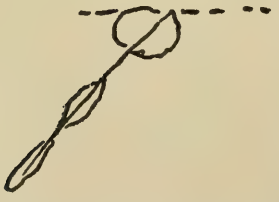
VIII

JULY, 1854

(ÆT. 36–37)

July 1. *Saturday.* P. M. — To Cliffs.

From the hill I perceive that the air is beautifully clear after the rain of yesterday, and not hot; fine-grained. The landscape is fine as behind a glass, the horizon-edge distinct. The distant vales toward the northwest mountains lie up open and clear and elysian like so many Tempes. The shadows of trees are dark and distinct. On the river I see the two broad borders of pads reflecting the light, the dividing line between them and the water, their irregular edge, perfectly distinct. The clouds are separate glowing masses or blocks floating in the sky, not threatening rain. I see from this hill their great shadows pass slowly here and there over the top of the green forest. Later a breeze rises and there is a sparkle on the river somewhat as in fall and spring. The wood thrush and tanager sing at 4 P. M. at Cliffs. The anychia in steep path beyond springs, almost.



Some boys brought me to-night a singular kind of spawn found attached to a pole floating in Fair Haven Pond. Some of it six feet below the surface, some at top, the up-

permost as big as a water-pail; a very *firm* and clear jelly, the surface covered with small rayed or star-shaped spawn (?). A great quantity of it.

July 2. Sunday. 4 A. M. — To Hill.

Hear the chip-bird and robin very lively at dawn. From the Hill, the sun rising, I see a fine river fog wreathing the trees — elms and maples — by the shore. I mark the outlines of the elms and *Salix Purshiana*, now so still and distinct, looking east. It is clear summer now. The cocks crow hoarsely, ushering in the long-drawn thirsty summer day. A day for cows. The morning the spring of the day. A few bullfrogs trump.

P. M. — To Flint's Pond and Smith's Hill with C.

Thimble-berries. Parsnip at Tuttle's. Tobacco-pipe well up. Spatulate or long-leaved sundew, some days. *Hypericum Canadense*, some days. *Pyrola elliptica*, apparently some days, or directly after *rotundifolia*, on east side of Smith's Hill. *Asclepias phytolaccoides*, a new plant, apparently two or three days on Smith's Hill. A blue high blueberry ripe. An abundance of red lilies in the upland dry meadow, near Smith's Spring trough; low, — from one to two feet high, — upright-flowered, more or less dark shade of red, freckled and sometimes wrinkle-edged petals; must have been some days. This has come with the intense summer heats, a torrid July heat like a red sunset threatening torrid heat. (Do we not always have a dry time just before the huckleberries turn?) I think this meadow was burnt over about a year ago.

Did that make the red lily grow? The spring now seems far behind, yet I do not remember the interval. I feel as if some broad invisible lethean gulf lay behind, between this and spring. *Geum strictum*, a new plant, apparently a week or ten days; some of the heads already five eighths of an inch in diameter; roadside at Gourgas sprout-land; aspect of a buttercup and *Potentilla Norvegica* with burs.[1] I see some *Lysimachia stricta* (?), with ends of petals coppery-reddish.

July 3. *Monday.* I hear the purple finch these days about the houses, — *à twitter witter weeter wee, à witter witter wee.*

P. M. — To Hubbard Bridge by boat.

On the great hummock dropped on Dennis's meadow last winter, I see now flourishing, of small plants, water milkweed, *Lysimachia stricta*, hedgehog (?) grass, horse-mint, arrowhead, onoclea, *Viola lanceolata*, gratiola, and the small-flowered hypericum, as well as meadow-grass.

The river and shores, with their pads and weeds, are now in their midsummer and hot-weather condition, now when the pontederias have just begun to bloom. The seething river is confined within two burnished borders of pads, gleaming in the sun for a mile, and a sharp snap is heard from them from time to time. Next stands the upright phalanx of dark-green pontederias. When I have left the boat a short time the seats become intolerably hot. What a luxury to bathe now! It is gloriously hot, — the first of this weather.

[1] Also near (north of) Assabet Bathing-Place, out of bloom, July 8.

I cannot get wet enough. I must let the water soak into me. When you come out, it is rapidly dried on you or absorbed into your body, and you want to go in again. I begin to inhabit the planet, and see how I may be naturalized at last. The clams are so thick on the bottom at Hubbard's Bathing-Place that, standing up to my neck in water, I brought my feet together and lifted up between them, so as to take off in my hand without dipping my head, three clams the first time, though many more dropped off. When you consider the difficulty of carrying two melons under one arm and that this was in the water, you may infer the number of the clams. A cone-flower (new plant), — *Rudbeckia hirta* (except that I call its disk not dull brown but dull or dark purple or maroon; however, Wood calls it dark purple), — in Arethusa Meadow. Saw one plucked June 25; blossomed probably about that time. Many yesterday in meadows beyond almshouse. Probably introduced lately from West. *Pycnanthemum muticum* at Hypericum corymbosum Ditch. Proserpinaca at Skullcap Pool, apparently five or six days. Touch-me-not, good while, — ten days at least; some seeds now spring. As I return down the river, the sun westering, I admire the silvery light on the tops and extremities of the now densely leaved golden willows and swamp white oaks and maples from the under sides of the leaves. The leaves have so multiplied that you cannot see through the trees; these are solid depths of shade, on the surface of which the light is variously reflected. Saw a fresh cherry-stone (must be cultivated cherry; wild not ripe) in the spring under Clamshell Hill, nearly half a

mile from a cherry tree. Must have been dropped by a bird. Mulberries some time.

July 4. A sultry night the last; bear no covering; all windows open.

8 A. M. — To Framingham.

Great orange-yellow lily, some days, wild yellow lily, drooping, well out. *Asclepias obtusifolia*, also day or two. Some chestnut trees show at distance as if blossoming. Buckwheat, how long? I probably saw *Asclepias purpurascens* (??) over the walls. A very hot day.

July 5. Another very hot night, and scarcely any dew this morning. *Lysimachia lanceolata* var. *hybrida*, a day or two, at Merrick's Bathing-Place. Bass at Island.

P. M. — To White Pond.

One hundred and nine swallows on telegraph-wire at bridge within eight rods, and others flying about. *Stachys aspera*, Clamshell Ditch. The blue-curls and fragrant everlasting, with their refreshing aroma, show themselves now pushing up in dry fields, — bracing to the thought. Horse-mint under Clamshell, apparently yesterday. On Lupine Knoll, picked up a dark-colored spear-head three and a half inches long, lying on the bare sand; so hot that I could not long hold it tight in my hand. Now the earth begins to be parched, the corn curls, and the four-leaved loosestrife, etc., etc., wilt and wither. Sericocarpus. Small circæa at Corner Spring, some days. *Rosa Carolina*,

apparently a day or two, Corner causeway; dull leaves with fine serrations, twenty-five to thirty, plus, on a side, and *narrow closed* stipules. *Asclepias incarnata* var. *pulchra*.

July 6. P. M. — To Beck Stow's.

Euphorbia maculata, good while. *Polygonum aviculare*, a day or two. Now a great show of elder blossoms. *Polygala sanguinea*, apparently a day or more. *Galium asprellum* in shade; probably earlier in sun. Partridges a third grown.

Veery still sings and toad rings.

On the hot sand of the new road at Beck Stow's, headed toward the water a rod or more off, what is probably *Cistudo Blandingii;* had *some* green conferva (?) on its shell and body. Length of upper shell, $6\frac{1}{2}$ inches; breadth behind, $4\frac{5}{8}$; tail beyond shell, $2\frac{1}{4}$. Did not see it shut its box; kept running out its long neck four inches or more; could bend it directly back to the posterior margin of the second [?] dorsal plate. Ran out its head further and oftener than usual. The spots pale-yellow or buff. Upper half of head and neck blackish, the former quite smooth for $1\frac{5}{8}$ inches and finely sprinkled with yellowish spots, the latter warty. The snout lighter, with five perpendicular black marks. Eyes large (?), irides dull green-golden. Under *jaw and throat clear chrome-yellow*. Under parts of neck and roots of fore legs duller yellow; inner parts behind duller yellow still. Fore legs with black scales, more or less yellow spotted above; at root and beneath pale-yellow and yellowish. Hind legs uniformly

black above and but little lighter beneath. Tail black all round. No red or orange about the animal. No hook or notch to jaw.

Plantain, some days, and gnaphalium, apparently two or three days.

July 7. P. M. — To lygodium.

Verbena urticifolia. Ilysanthes, three or four days back, flat east of Clamshell Shore. Large form of arrowhead, two or more days. Woodcock at the spring under Clamshell. *Campanula aparinoides*, apparently three or four days. The clover heads are turned brown and dry, and whiteweed is also drying up. I think that that is the water dock just opening in J. P. Brown's meadow. Disturbed two broods of partridges this afternoon, — one a third grown, flying half a dozen rods over the bushes, yet the old, as anxious as ever, rushing to me with the courage of a hen. Columbines still.

Lygodium palmatum hardly yet in flower, I should say; for the most very green and tender atop and not much flatted out. Saw a pretty large hawk with narrow and long wings, black-tipped beneath, and white rump, light beneath, circling over the Ministerial Swamp with a loud, shuffling, jay-like and somewhat flicker-like sound.

July 8. *Saturday.* P. M. — To Assabet Bathing-Place.

Melilot, a day or two. *Spiranthes gracilis*, a day or two (?). A *Lysimachia stricta* (?) by birch fence in path

beyond Shad-bush Meadow, with whorls of three leaves and spike about eight inches long, about June 26th; lower half now out of bloom, one quarter in bloom, upper quarter budded. Ludwigia. The 4th and 5th were the hot bathing days thus far; thermometer at 98 and 96 respectively. Sium almost; say 9th.

8 P. M. — Full moon; by boat to Hubbard's Bend.

There is wind, making it cooler and keeping off fog, delicious on water. The moon reflected from the rippled surface like a stream of dollars. I hear a few toads still. See a bat; how long? The bullfrogs trump from time to time. It is commonly a full round *errr, err, err, err* (gutturally, and increasing in volume), and then coarsely trilled (?), *er-er-er, er-er-er, er-er-er;* occasionally varied like the looing of a bull. The whip-poor-wills are heard, and the baying of dogs.

The *Rosa nitida* I think has [been] some time done; the *lucida* generally now ceasing, and the *Carolina* (?) just begun.

The middle lechea not quite.

July 9. *Sunday.* P. M. — Fair Haven Hill *via* Hubbard's Bathing-Place.

Vaccinium vacillans berry, four or five days; common blue huckleberry. Hubbard aster, some days. Is it not *Tradescanti*-like? Begins to blossom low in the grass. *Hypericum corymbosum,* not yet. Tansy by railroad causeway, a day or more. *Chenopodium album.*

Examined a lanceolate thistle which has been

pressed and laid by a year. The papers being taken off, its head sprang up more than an inch and the downy seeds began to fly off.

July 10. *Monday.* Took up one of the small tortoise eggs which I had buried June 15th. The eye was remarkable, developed in the colorless and almost formless head, one or two large dark circles of the full diameter; a very distinct pulsation where the heart should be and along the neck was perceptible; but there seemed to be no body but a mass of yellow yolk.

P. M. — To Hubbard's Close, spotted pyrola, and Walden.

Gaultheria, apparently two or three days in open ground. Some choke-berry leaves in dry places are now red, some locust leaves and elm leaves yellow. *Lycopus sinuatus*, a day or two. *Platanthera lacera*, in one place, apparently a week; Stow's strawberry meadow ditch. *Ludwigia palustris*, same place, apparently three or four days. *Pycnanthemum lanceolatum*, two or three days. *Polygala cruciata*, Hubbard's Close, two or three days. I find that most of the wild gooseberries are dried up and blackened. *Solidago stricta*, apparently to-morrow or next day. Northern wild red cherry ripe apparently some days. Low blackberry. A sericocarpus (?) in Poorhouse Meadow with linear, or narrow-spatulate, entire, blunt leaves.

The following are the birds I chanced to hear in this walk (did not attend much): The seringos on fences, *link* of bobolink, crow, oven-bird, tanager, chewink,

huckleberry-bird (pretty often and loud), flicker cackle, wood thrush, robin (?), before 3 P. M.; then red-eye, veery trill, catbird rigmarole, etc., etc.

This is what I think about birds now generally:—

See a few hawks about.
Have not heard owls lately, not walking at night.
Crows are more noisy, probably anxious about young.
Hear phœbe note of chickadee occasionally; otherwise inobvious.
Partridge, young one third grown.
Lark not very common, but sings still.
Have not heard *conqueree* of blackbird for about a month, methinks.[1]
Robin still sings, and in morning; song sparrow and bay-wing.
See no downy woodpeckers nor nuthatches.
Crow blackbirds occasionally chatter.
Hear flicker rarely.
Rush sparrow, common and loud.
Saw a snipe within two or three days.[2]
Woodcock seen within two or three days.
Think I have heard pine warbler within a week.
Cuckoo and quail from time to time.
Barn swallow, bank swallow, etc., numerous with their young for a week or two.
I hear the plaintive note of young bluebirds.
Chip-sparrow in morning.
Purple finch about and sings.
Martin lively.
Warbling vireo still, and wood thrush, and red-eye, and tanager, all at midday.
Catbird's rigmarole still.
Chewink sings; and veery trill from out shade.
Whip-poor-will at evening.
Summer yellowbird and yellow-throat rarely.

[1] Heard one *conqueree* July 11th. Chattering flocks now of females and young over river.

[2] And July 11th.

Goldfinch oftener twitters over.
Oven-bird still.
Evergreen-forest note, I think, still.
Night-warbler of late.
Hardly a full bobolink.
Kingbird lively.
Cherry-bird commonly heard.
Think I saw turtle dove within a day or two.

The singing birds at present are: —

Villageous: Robin, chip-bird, warbling vireo, swallows.
Rural: Song sparrow, seringos, flicker, kingbird, goldfinch, *link* of bobolink, cherry-bird.
Sylvan: Red-eye, tanager, wood thrush, chewink, veery, oven-bird, — all even at midday. Catbird full strain, whip-poor-will, crows.

July 11. *Tuesday.* P. M. — By boat to Fair Haven. White geum, probably about the 5th (not the 3d).

Pontederia now makes a handsome show. The female red-wings and their young now fly in small chattering flocks over the river. The smallest-flowered hypericum, several days; have I mentioned it? Purple utricularia well out since the 5th; say 7th. The black high blueberries are a trifle earlier, small and acid. The *Rosa lucida* still common. *Utricularia cornuta* at Fair Haven, apparently two days. The water-target is common off this shore. *Hypericum corymbosum* in front of Lee's Cliff, a day or two. The drought is very obvious on these rocks now, which are so verdurous in spring. The ivy (*Toxicodendron*), *Arenaria serpyllifolia*, etc., are quite sere and brown. Pennyroyal, thimble-berries, and ferns also are withering. Some huckleberries quite as if dried on a pan. Ampelopsis out three or

four days on the rock. Parietaria, apparently two or three days against rock. Handsome now from these rocks the bay (on the south side of Fair Haven at the inlet of river),

with its spit of shining pads. *Lobelia inflata*, a day or more. *Veronica serpyllifolia* about done. There is much large bur-reed leaves afloat and lodged in the middle of the river at Clamshell Bend. Did the wind tear it up? I heard Conant's cradle cronching the rye behind the fringe of bushes in the Indian field. Reaping begun. Sun set when I was off Nut Meadow. A straight edge of massy cloud had advanced from the south-southeast and now stretched overhead from west-southwest to east-northeast, and after sunset reflected a soft fawn-colored (?) light on the landscape, lighting up with harmonious light the dry parched and shorn hillsides, the soft, mellow, fawn-colored light seeming to come from the earth itself.

July 12. P. M. — To Dodge's Brook.

The early cotton-grass is now about gone from Hubbard's Close. With this month began the reign of river-weeds obstructing the stream. Potamogetons and heart-leaves, etc., now for a *long* time covered with countless mosquito cases (?). They catch my oars and retard the boat. A rail will be detained a month by them in mid-stream, and tortoises (*Sternothærus* or *Emys*

picta), four or five or more in a row, lie along it. Many young barn (?) swallows (they have a darker crescent on the breast and long tail-feathers not grown) sit in flocks on the bared dead willows over the water and let me float within four or five feet. Birds do not distinguish a man sitting in a boat. I see a green bittern wading in a shallow muddy place, with an awkward teetering, fluttering pace. Button-bush. Observed a pickerel in the Assabet, about a foot long, headed upstream, quasi-transparent (such its color), with darker and lighter parts contrasted, very still while I float quite near. There is a constant motion of the pectoral fins and also a waving motion of the ventrals, apparently to resist the stream, and a slight waving of the anal, apparently to preserve its direction. It darted off at last by a strong sculling motion of its tail. See white maple leaves floating bottom up, covered with feathery aphides.

A *Lilium Canadense* (at Dodge Brook corner by road), approaching *superbum*, four and a half feet high, with a whorl of four flowers, and two more above, somewhat pyramidal, and petals recurved.

July 13. *Thursday.* 2 P. M. — To Bare Hill, Lincoln, by railroad.

Have heard a faint locust-like sound from crickets a week or two. In the midst of July heat and drought. The season is trivial as noon. I hear the hot-weather and noonday birds, — red-eye, tanager, wood pewee, etc. Plants are curled and withered. The leaves dry, ripe like the berries. The point of a lower leaf of a

smooth sumach is scarlet, and some geranium leaves. Many birch leaves are yellow and falling. Leaves are very much eaten (June is the time to collect perfect ones); of some kinds hard to find a perfect specimen, unless of a firm texture. The *Pyrus arbutifolia* is very thick and glossy dark green. The tupelo leaf is pretty firm and perfect, not *so* glossy, more or less winding, and the shoots are zigzag or winding. *Polygonum Hydropiper* at Baker Swamp. Thoroughwort, tomorrow or next day. *Scutellaria lateriflora*, some days at least. The chestnuts, now in full bloom, are conspicuous from the hills (Bare Hill), like a yellowish or creamy-tinged rime.

Vaccinium vacillans on Bare Hill ripe enough to pick, now considerably in advance of huckleberries; sweeter than last and grow in dense clusters. The *V. Pennsylvanicum* is soft and rather thin and tasteless, mountain and spring like, with its fine light-blue bloom, very handsome, simple and ambrosial. This *vacillans* is more earthy, like solid food. Many of the huckleberries here on the hilltop have dried black and shrivelled before ripening.

Boys go after the cows now about 5.30 o'clock. Decodon not distinctly flower-budded yet. Gnaphalium (pearly) well out, say yesterday. If there is an interregnum in the flowers, it is when berries begin. Scent the bruised leaves of the fragrant goldenrod along the Lincoln road now. What I have called *Solidago arguta* at Walden (*vide* radical leaves); also an aster, probably *Diplopappus umbellatus*, at Baker Swamp, will open in a few days.

July 14. *Friday.* Awake to day of gentle rain, — very much needed; none to speak of for nearly a month, methinks. The cooler and stiller day has a valuable effect on my spirits.

P. M. — Over the Hill to Brown's watering-place.

It holds up from time [to time], and then a fine, misty rain falls. It lies on the fine reddish tops of some grasses, thick and whitish like morning cobwebs. The stillness is very soothing. This is a summer rain. The earth is being bedewed. There is no storm or violence to it. Health is a sound relation to nature. Anychia plenty by the watering-place (with the amphicarpæa), but calyx apparently not expanded. Amphicarpæa, not yet. Penthorum, three or four days. Xyris, apparently three or four days in meadow close by. Hardhack, two or three days. A hedyotis still. Elodea to-morrow. The red capsules of the *Hypericum ellipticum*, here and there. This one of the fallward phenomena in still rainy days.

July 15. *Saturday.* P. M. — To Hubbard's Bridge causeway *via* river.

Rained still in forenoon; now cloudy. Fields comparatively deserted to-day and yesterday. Hay stands cocked in them on all sides. Some, being shorn, are clear for the walker. It is but a short time that he has to dodge the haymakers. This cooler, still, cloudy weather after the rain is very autumnal and restorative to our spirits. The robin sings still, but the goldfinch twitters over oftener, and I hear the *link link* of the bobolink (one perfect strain!), and the crickets

creak more as in the fall. All these sounds dispose our minds to serenity. Perhaps the mosquitoes are most troublesome such days in the woods, if it is warm enough. We seem to be passing, or to have passed, a dividing line between spring and autumn, and begin to descend the long slope toward winter. On the shady side of the hill I go along Hubbard's walls toward the bathing-place, stepping high to keep my feet as dry as may be. All is stillness in the fields. The calamint (*Pycnanthemum muticum*), standing by the wall with its hoary upper leaves, full of light even this cloudy day and reminding of the fragrance which I know so well, is an agreeable sight. I need not smell it; it is a balm to my mind to remember its fragrance.

I hear a bay-wing on the wall near by, sound[ing] far away, — a fainter song sparrow strain, somewhat. I see its open mouth and quivering throat, yet can hardly believe the seemingly distant strain proceeds from it, *yaw yaw, twee twee, twitter twitter, te twee twe tw tw tw*, and so ends with a short and rapid trill.

Again I am attracted by the Clamshell reach of the river, running east and west, as seen from Hubbard's fields, now beginning to be smoothed as in the fall. First, next the meadow, is the broad dark-green rank of pickerel-weeds, etc., etc. (polygonum, etc.), then the light-reflecting edging of pads, and then the smooth, still, cloud-reflecting water. My thoughts are driven inward, even as clouds and trees are reflected in the still, smooth water. There is an inwardness even in the mosquitoes' hum, while I am picking blueberries in the dank wood.

Rhexia near the *Rhus copallina*, apparently yesterday. The flicker still, and the veery full, and Maryland yellow-throat, and nuthatch. Many birds begin to fly in small flocks like grown-up broods. Green grapes and cranberries also remind me of the advancing season. The former are as large as ripe cranberries, the latter as big as peas, though the vines are still full of blossoms. Cymbidiums are quite fresh and pogonias linger still. *Drosera rotundifolia*, end of Hubbard's bank wall, Corner road, some days, — perhaps a fortnight, for it was nearly out on the 2d, its lower flowers first, and now dry.

The stems and leaves of various asters and goldenrods, which ere long will reign along the way, begin to be conspicuous. *Amaranthus hybridus*, several days at least. It has come out quite fair and warm. There are many butterflies, yellow and red, about the *Asclepias incarnata* now.

July 16. *Sunday.* A thick fog began last night and lasts till late this morning; first of the kind, methinks.

P. M. — *Via* railroad and pond to Saw Mill Brook.

Many yellow butterflies and red on clover and yarrow. Is it the yellow-winged or Savannah sparrow with yellow alternating with dark streaks on throat, as well as yellow over eye, reddish flesh-colored legs, and two light bars on wings? *Solidago nemoralis* yesterday.

Woodcock by side of Walden in woods. Methinks there were most devil's-needles a month ago. *Lycopus Virginicus* by Target Meadow, a day or two; maybe

as long as the other elsewhere. *Ludwigia palustris*[1] grows there. *Goodyera repens* to-morrow. *Polygala verticillata*, apparently some days. The *Rhus Toxicodendron* leaves are turned clear light yellow in some places, in others, many dried and brown. *Mimulus ringens* at Saw Mill Brook, apparently two days. The large (?) circæa (it is the *lutetiana*, though the flowers are white), apparently two or three days. Trientalis, ash-colored fruit. After the late rains and last night's fog, it is *somewhat* dog-dayish, and there is a damp, earthy, mildewy scent to the ground in wood-paths. *Aralia nudicaulis* berries well ripe. The *Polygala sanguinea* heads in the grass look like sugar-plums.

July 17. *Monday.* Last night and this morning another thick dogdayish fog. I find my chamber full this morning. It lasts till 9 A. M.

11 A. M. — By river to Fair Haven.

I go to observe the lilies. I see a rail lodged in the weeds with seven tortoises on it, another with ten, another with eleven, all in a row sunning now at midday, hot as it is. They are mostly the painted tortoise. Apparently no weather is too hot for them thus to bask in the sun. The pontederia is in its prime, alive with butterflies, yellow and others. I see its tall blue spikes reflected beneath the edge of the pads on each side, pointing down to a heaven beneath as well as above. Earth appears but a thin crust or pellicle. The river was at its lowest thus far probably on the 13th. The rains succeeding the drought have now

[1] Box kind.

raised it a little, and this forenoon, though a little air is stirring, the water is smooth and full of reflections here and there, as if there had been oil in those rains, which smoothed it. In that hottest and driest weather about the 4th, there was yet considerable air stirring. Methinks that about *this* time the waters begin to be more glassy, dark and smooth. The cuckoo *cows* at midday.

At Purple Utricularia Shore, there are, within a circle of four or five rods' diameter, ninety-two lilies fairly open and about half a dozen which appear to have already partly closed. I have seen them far more numerous. I watch them for an hour and a half.

At 11.45...92 fairly open
At 12 ...88
At 12.15...75
At 12.30...46
At 12.45...26
At 1 ... 4 which are more or less stale

By about 1.30 they are all shut up, and no petal is to be seen up and down the river unless a lily is broken off. You may therefore say that they shut up between 11.30 and 1.30, though almost all between 12 and 1. I think that I could tell when it was 12 o'clock within half an hour by the lilies. One is about an hour about it. The petals gradually draw together, and the sepals raise themselves out of the water and follow. They do not shut up so tight but that a very little white appears at the apex. Sometimes a sepal is held back by a pad or other weed, leaving one side bare. Many fall over on their sides more or less, but none withdraw

under water as some have said. The lilies reach from the water's edge, where they are raised two or three inches above the surface, out five or six rods to where the water is four feet deep, and there succeed the *small* yellow lily.

Meanwhile large yellowish devil's-needles, coupled, are flying about and repeatedly dipping their tails in the water. Why are not all the white lily pads red beneath? On the muddy bottom, under the pads and between their stems, are countless red bugs crawling about. The birds are quite lively at this hour of noon, — the robin, red-eye, wood pewee, martins, and kingbirds, etc. The cuckoo is a very neat, slender, and graceful bird. It belongs to the nobility of birds. It is elegant. Here and there a phalanx of bluish-green *large* bulrushes rises near the shore, and all along a troop of pontederias, fronted and often surrounded by a testudo of pads. I feel an intense heat reflected from the surface of the pads. The rippled parts of the stream contrast with the dark smooth portions. They are separated as by an invisible barrier, yet, when I paddle into the smoothness, I feel the breeze the same. I see where a *Juncus militaris* has grown up through a white lily pad and stands two feet above it. Its hard, sharp point pierced it, instead of lifting it off the water. It reminds me of the Saladin's cutting a silk handkerchief in the air with his cimetar. This continual snapping of the pads which I hear appears to be made underneath and *may be* produced by minnows darting at the insects which feed on them.

At Cardinal Shore, *Lobelia cardinalis* a day or more. *Pycnanthemum incanum*, apparently several days. It also is hoary at top. Staghorn sumach in fruit. The fall of hellebore and cabbage has begun. The former lies along, yellow and black and decaying. The stinging spotted flies are very troublesome now. They settle in the hollows of the face, and pester us like imps. The clams lie on their edges or ends like buds or bulbs crowded together. *Desmodium acuminatum* at Conant Orchard Grove, perhaps two or three days. One four feet high, its leaves making a flat cricket, a foot from the ground.

Agrimony here almost done. *Diplopappus cornifolius*, a day or more. I was surprised by the loud humming of bees, etc., etc., in the bass tree; thought it was a wind rising at first. Methinks none of our trees attract so many.

I am surprised to see crossing my course in middle of Fair Haven Pond great yellowish devil's-needles, flying from shore to shore, from Island to Baker's Farm and back, about a foot above the water, some against a head wind; also yellow butterflies; suggesting that these insects see the distant shore and resolve to visit it. In fact, they move much faster than I can toward it, yet as if they were conscious that they were on a journey, flying for the most part straight forward. It shows more enterprise and a wider range than I had suspected. It looks very bold. If devil's-needles cross Fair Haven, then man may cross the Atlantic. Seeing him, I am reminded of Horace's lines about the breast of triple brass. Pasture thistle on Lee's

Cliff, three or four days. Woodbine on rocks begun to redden there. I start two green bitterns in different places amid the weeds by the shore. In Conant's meadow just behind Wheeler's, the smaller fringed orchis not quite reached by the mowers. It may have been out four or five days. It is a darker purple for being so exposed. None yet opening in the shade. *Aralia racemosa* at Spring a short time. The sarothra tomorrow. The late rose not *fairly* begun along the river, now when *lucida* is leaving off.

July 18. *Tuesday.* 5 A. M. — Up Turnpike.

A haymaking morning fog, through and above which the trees are glorious in the sun. The elm leaves appear to be drinking the moisture along the dusty, debauched highway; some of them yellowing. Whence these fogs and this increase of moisture in the air? The kingbird, song sparrows, and quail are lively. The centaurea, not yet. I think I have not heard a night-warbler for a fortnight. *Erigeron Canadensis. Erigeron strigosus* I must call the other.

P. M. — To Sam Barrett's by boat, and old Wheeler house.

A hot midsummer day with a sultry mistiness in the air and shadows on land and water beginning to have a peculiar distinctness and solidity. The river, smooth and still, with a deepened shade of the elms on it, like midnight suddenly revealed, its bed-curtains shoved aside, has a sultry languid look. The atmosphere now imparts a bluish or glaucous tinge to the distant

trees. A certain debauched look, as the highway in the morning. This a crisis in the season. After this the foliage of some trees is almost black at a distance. I do not know why the water should be so remarkably clear and the sun shine through to the bottom of the river, making it so plain. Methinks the air is not clearer nor the sun brighter, yet the bottom is unusually distinct and obvious in the sun. There seems to be no concealment for the fishes. On all sides, as I float along, the recesses of the water and the bottom are unusually revealed, and I see the fishes and weeds and shells. I look down into the sunny water. In midsummer, when its foliage is thickest and stems most concealed, the *Salix Purshiana* is most beautiful. Its leafy sails are now all set, concealing its spars, and it appears to float in light masses buoyantly on the water.

Methinks the asters and goldenrods begin, like the early ripening leaves, with midsummer heats. Now look out for these children of the sun, when already the fall of some of the very earliest spring flowers has commenced.

The Island is now dry and shows few flowers. Where I looked for early spring flowers I do not look for midsummer ones. Such places are now parched and withering. Blue vervain, apparently a day; one circle is open a little below the top. As I go along the Joe Smith road, I see some of the lower leaves of the white vervain turned a faint mulberry-color. Brooks has let out some of his pigeons, which stay about the stands or perches to bait others. Wild ones nest in his woods quite often. He begins to catch them the middle of August.

I found so many berries on that rocky road, between and about the careless farmers' houses and walls, that the soil seemed more fertile than where I live. Every bush and bramble bears its fruit; the sides of the road are a fruit garden; blackberries, huckleberries, thimbleberries, fresh and abundant, no signs of drought; all fruits in abundance; the earth teems. What are the virtues of the inhabitants that they are thus blessed? Do the rocks hold moisture, or are there no fingers to pluck them? I seem to have wandered into a land of greater fertility, some up-country Eden. Are not these the delectable hills? It is a land flowing with milk and honey. Great shining blackberries peep out at me from under the leaves upon the rocks. There the herbage never withers. There are abundant dews.

Now comes the dews and fogs to save the berries and the transplanted trees.

Elecampane will apparently open in two or three days; begins to show some yellow. Choke-cherry, though not dark.[1] By the elecampane and the Wheeler house, to my great surprise growing abundantly in the road, the *Monarda fistulosa*, apparently a week at least, — three or more feet high with a few heads containing a whorl of large, very showy crimson flowers, with crimsoned bracts in whorls beneath, with a balm or summer savory or sweet marjoram fragrance. These things out of the heavenward northwest. Perhaps it is Wood's variety *mollis*. It cannot be the *didyma*, for the corolla is not more than one and three eighths inches long.

[1] Say a week later; ate some black, August 8th.

Two common milkweeds I do not identify. First apparently *Asclepias Syriaca* of Linnæus and Bigelow; nectaries "with an oblique ridge on each side the fissure;" horns long with a slender point as high as the nectaries; leaves gradually acute. It appears to be *A. Cornuti* of Gray, but what does he mean by leaves "with a slight point"? Can he refer to the mucronate-leafed kind? Apparently *A. Cornuti* of Wood, but in his plate he gives the short, stout, recurved horn of the mucronate kind. *Vide* if the heads are spinous, as *A. Cornuti.*

Then there is a common [kind] with many thick, elliptical, short-petioled leaves (up railroad, June 25); mucronated; stout-stemmed. Is it *purpurascens* of Bigelow? It is not dark-purple. Not *purpurascens* of Gray, when he says that the pedicels are only about twice the length of the divisions of the corolla and that only the lower leaves are mucronate. Are the pods smooth? [1]

This side the sunflower house, against woods, in road, just beyond large pine, *Hedyotis longifolia,* a good while tufted, but without striæ in throat, many-flowered.

We have very few bass trees in Concord, but walk near them at this season and they will be betrayed, though several rods off, by the wonderful susurrus of the bees, etc., which their flowers attract. It is worth going a long way to hear. I was warned that I was passing one in two instances on the river, — the

[1] The pods have soft spinous projections, and it must be *A. Cornuti* of Gray (July 30th). The first kind, opposite the monarda, has no spinous projections.

only two I passed, — by this remarkable sound. At a little distance [it] is like the sound of a waterfall or of the cars; close at hand like a factory full of looms. They were chiefly humblebees, and the great globose tree was all alive with them. I heard the murmur distinctly fifteen rods off. You will know if you pass within a few rods of a bass tree at this season in any part of the town, by this loud murmur, like a waterfall, which proceeds from it.

July 19. P. M. — To Beck Stow's and Walden.

Alisma, apparently a day or more. *Polygonum Careyi* to-morrow. In Moore's Swamp I pluck cool, though not very sweet, large red raspberries in the shade, making themselves dense thickets. Wild holly berries, a day or two. The throttled sound of a cuckoo from out the shade of a grove. How lustily the poison-dogwood grows, — five feet from the ground this year and still growing, covered with a rich glaucous bloom! The more smothering, furnace-like heats are beginning, and the *locust* days. Crotalarias but few, apparently a day or two only. The tall, wand-like, large-leaved *Desmodium Canadense*, some days at least in the dry, rough sunflower field. Black choke-berry, several days. High blueberries scarce, but a few half an inch or more in diameter. Apparently a catbird's nest in a shrub oak, lined with root-fibres, with three green-blue eggs. *Erigeron annuus* perhaps fifteen rods or more beyond the Hawthorn Bridge on right hand, — a new plant, — probably last month. Thinner leaves than the *strigosus*. The white cotton-grass now

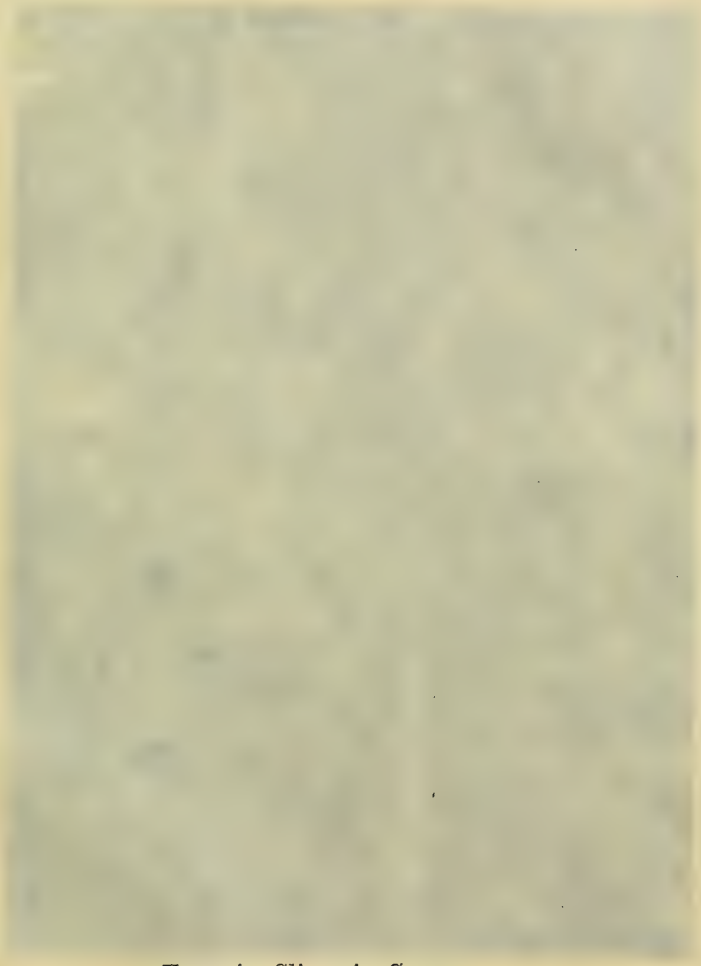
(and how long?) at Beck Stow's appears to be the *Eriophorum gracile* (?). I see no rusty ones. In the maple swamp at Hubbard's Close, the great cinnamon ferns are very handsome now in tufts, falling over in handsome curves on every side, — a rank undergrowth about three feet high, completely hiding the dead leaves. Some are a foot wide and raised up six feet long. Clintonia berries in a day or two. I am surprised to see at Walden a single *Aster patens* with a dozen flowers fully open a day or more. Smooth sumach berries. The anychia shows some small pods; probably flowered about July 1st. *Lechea minor* shows stamens.

A wood thrush to-night. Veery within two or three days.

July 20. A very hot day, a bathing day. Warm days about this.

P. M. — To Hubbard Bath.

That long, narrow sparganium, which is perhaps the smaller one, growing long in our river, stands thick, with the heart-leaf and potamogeton, in the middle in shallow places. Methinks there begins to be a bluish scum on the water at this season, somewhat stagnant-looking. This may be the oil which smooths it. The large potamogeton in midstream is ten feet long. There is an immense quantity of clams there in the middle where it is four feet deep. I dived and took up four large ones in one hand at the first grip. Now and for several days I have seen, on the leaves of the red and black oaks, minute caterpillars feeding, with



Ferns in Clintonia Swamp

very small pearly, dewdrop-like ova near them partly hatched. Skunk-cabbage fruit some days; cut by the mowers.

A muttering thunder-cloud in northwest gradually rising and with its advanced guard hiding in the sun and now and then darting forked lightning. The wind rising ominously also drives me home again. At length down it comes upon the thirsty herbage, beating down the leaves with grateful, tender violence and *slightly* cooling the air; but all the thunder and lightning was in its van. How soon it swept over and we saw the flash in the southeast! Corn in blossom these days.

July 22. The hottest night, — the last.

It was almost impossible to pursue any work out-of-doors yesterday. There were but few men to be seen out. You were prompted often, if working in the sun, to step into the shade to avoid a sunstroke. At length a shower passing in the west slightly cooled the air. The domestic animals suffer much. Saw a dog which had crawled into a corner and was apparently dying of heat. Fogs almost every morning now. First *noticed* the dry scent of corn-fields a week ago.

Now clouds have begun to hang about all day, which do not promise rain, as it were the morning fogs elevated but little above the earth and floating through the air all day.

P. M. — To Assabet Bath.

Centaurea, one or two flowerets. There is a cool wind from east, which makes it cool walking that way while it is melting hot walking westward. Spear-leaved

thistle, apparently several days, some being withered. The larger pinweed, apparently a few days, probably same date with the *minor;* its lower leaves dull-red, those of *Lechea minor* equally red or brighter. Some *Amelanchier obovata* leaves a light dirty scarlet. Zizania, a day, with a handsome light-green panicle a foot or more long, a long slender stem, and corn-like leaves frequently more than an inch wide. Diervilla leaves dull red and green. The large primrose lower leaves a clear dark red. The *Epilobium coloratum* lower leaves very dark red. *Gerardia flava,* apparently two or three days, Lupine Hillside up railroad, near fence. Also *Solidago odora,* a day or two, there, and what I will call *S. puberula* (?), to-morrow. *S. altissima* on railroad, a day or two. When the flower-buds of the boehmeria, just ready to open, are touched with a pin, the stamens spring out remarkably, scattering their pollen.

July 23. Sunday. P. M. — To Walden *via* Hubbard's Grove and Fair Haven Hill.

Carrot by railroad, some time; say ten days. *Eupatorium purpureum.* There is a peculiar light reflected from the shorn fields, as later in the fall, when rain and coolness have cleared the air. *Eupatorium pubescens,* to-morrow. The white orchis at same place, four or five days at least; spike one and three quarters by three inches. I see small flocks of song sparrows, etc., rustle along the walls and fences. *Lonicera Ciliata,* apparently several days, Corner causeway, right side.

Boehmeria there also. Since the 19th, have heard locusts oftener. *Aster acuminatus* at Radula Swamp, in a day or two. My three-leaved *Lysimachia stricta* (?) at Radula Swamp, common. *A. Radula* (?), a day. Saw yesterday on edge of Lee House Meadow a low blueberry (?) bush with large oblongish black berries and narrow leaves, with little or no bloom, conspicuous calyx, apparently between *Vaccinium vacillans* and *V. corymbosum*. Some elsewhere two and a half feet high. I also have seen on Fair Haven Hill-side, near west spring, a sort of larger *V. Pennsylvanicum* with oblong black berries and conspicuous calyx. *Lespedeza capitata*, Lupine Bank, a day. *Cerasus pumila* berries, some time. Hazel leaves in dry places have begun to turn yellow and brown. *Lespedeza violacea*, apparently several days. I see broods of partridges later than the others, now the size of the smallest chickens. Onoclea green fruit conspicuous. See a thunder-cloud coming up in northwest, but as I walk and wind in the woods, lose the points of compass and cannot tell whether it is travelling this way or not. At length the sun is obscured by its advance guard, but, as so often, the rain comes, leaving thunder and lightning behind.

July 24. The last four or five days it has been very hot and [we] have been threatened with thunder-showers every afternoon, which interfered with my long walk, though we had not much. Now, at 2 P. M., I hear again the loud thunder and see the dark cloud in the west. Some small and nearer clouds are float-

ing past, white against the dark-blue distant one. Burdock, probably 20th.

July 25. A decided rain-storm to-day and yesterday, such as we have not had certainly since May. Are we likely ever to have two days' rain in June and the first half of July? There is considerable wind too.

P. M. — To Bare Hill, Lincoln, *via* railroad.

High blackberries, a day or two. The middle umbellet of the bristly aralia in some places, also a day or more. *Solidago bicolor*, to-morrow. I still see the cracks in the ground in old pastures, made last winter. The turtle dove dashes away with a slight note from midst of open pastures. *Diplopappus umbellatus* just beyond Baker Swamp, on right hand of road, probably about ten days; say July 15. I see some oak sprouts from the stump, six feet high. Some are now just started again after a pause, with small red leaves as in the spring. Clematis, apparently a day or two. *Hedyotis longifolia* on Bare Hill still. Decodon, not yet, but will apparently open in two or three days. The rain has saved the berries. They are plump and large. The long chestnut flowers have fallen and strew the road. *Arabis Canadensis*, sickle-pod, still in flower and with pods not quite two inches long. Pennyroyal, a day or two. Hear a wood thrush. *Desmodium nudiflorum*, a week at least. Have I not noticed it before? I now start some packs of partridges, old and young, going off together without mewing. Saw in woods a toad, dead-leaf color with black spots.

July 26. *Wednesday.* *Polygonum hydropiperoides* first obvious. Mikania, a day or two. Lilies open about 6 A. M. Methinks I have heard toads within a week. A white mildew on ground in woods this morning.

P. M. — To lime-kiln *via* rudbeckia.

Ate an early apple from one of my own trees. Amaranthus, apparently three or four days. The under sides of its lower leaves are of a rich pale lake-color. This appears to have nothing to do with their maturity, since very young and fresh ones are so. I see these in Hosmer's onion garden, where he is weeding, and am most attracted by the weeds.

One reason why the lately shorn fields shine so and reflect so much light is that a lighter-colored and tender grass, which has been shaded by the crop taken off, is now exposed, and also a light and fresh grass is springing up there. Yet I think it is not wholly on this account, but in a great measure owing to a clearer air after rains which have succeeded to misty weather. I am going over the hill through Ed. Hosmer's orchard, when I observe this light reflected from the shorn fields, contrasting affectingly with the dark smooth Assabet, reflecting the now dark shadows of the woods. The fields reflect light quite to the edge of the stream. The peculiarity of the stream is in a certain languid or stagnant smoothness of the water, and of the bordering woods in a dog-day density of shade reflected darkly in the water. Alternate cornel berries, a day or two.

To-day I see in various parts of the town the yellow butterflies in fleets in the road, on bare damp sand (not dung), twenty or more collected within a diam-

eter of five or six inches in many places. They are a greenish golden, sitting still near together, and apparently headed one way if the wind blows. At first, perhaps, you do not notice them, but, as you pass along, you disturb them, and the air is suddenly all alive with them fluttering over the road, and, when you are past, they soon settle down in a new place. How pretty these little greenish-golden spangles! Some are a very pale greenish yellow. The farmer is not aware how much beauty flutters about his wagon. I do not know what attracts them thus to sit near together, like a fleet in a haven; why they collect in groups. I see many small red ones elsewhere on the sericocarpus, etc., etc.

Rudbeckia, apparently three or four days at least; only the middle flower yet for most part. Rusty cotton-grass how long. Green grapes have for some days been ready to stew. *Diplopappus linariifolius. Aster dumosus.* Almost every bush now offers a wholesome and palatable diet to the wayfarer, — large and dense clusters of *Vaccinium vacillans*, largest in most moist ground, sprinkled with the red ones not ripe; great high blueberries, some nearly as big as cranberries, of an agreeable acid; huckleberries of various kinds, some shining black, some dull-black, some blue; and low blackberries of two or more varieties. The broods of birds just matured find thus plenty to eat. Gymnadenia [*sic*], maybe five or six days in swamp southeast of lime-kiln; one without any spurs. It is a windy day and hence worse [?] in respect to birds, like yesterday, yet almost constantly I hear borne on the wind from far, mingling with the sound of the wind, the z-ing of the

locust, scarcely like a distinct sound. Vernonia, begun in centre a day.

July 28. *Friday.* Clethra. Methinks the season culminated about the middle of this month, — that the year was of indefinite promise before, but that, after the first intense heats, we postponed the fulfillment of many of our hopes for this year, and, having as it were attained the ridge of the summer, commenced to descend the long slope toward winter, the afternoon and down-hill of the year. Last evening it was much cooler, and I heard a decided fall sound of crickets.

Partridges begin to go off in packs.

Lark still sings, and robin.

Small sparrows still heard.

Kingbird lively.

Veery and wood thrush (?) not very lately, nor oven-bird.

Red-eye and chewink common.

Night-warbler[1] and evergreen-forest note not lately.

Cherry-bird common.

Turtle dove seen.

July 29. P. M. — Berrying to Brooks Clark's.

Rich-weed, how long? *Amaranthus hypochondriacus,* apparently some days, with its interesting spotted leaf, lake beneath, and purple spike; amid the potatoes.

July 30. *Sunday.* To lygodium.

Cuscuta, not long. *Desmodium Canadense* is to be

[1] See forward.

found at Clamshell Hill oaks. I have found the new rudbeckia in five distinct and distant parts of the town this year, — beyond almshouse, Arethusa Meadow, Sam. Wheeler meadow, Abel Hosmer meadow, and J. Hosmer meadow. Also in last place, beyond ditch, the rusty cotton-grass is now common. *Cicuta bulbifera*, apparently a week or more. Is that goose-grass near yellow thistles? Opened one of the snapping turtle's eggs at Dugan Desert, laid June 7th. There is a little mud turtle squirming in it, apparently perfect in outline, shell and all, but all *soft* and of one consistency, — a bluish white, with a mass of yellowish yolk (?) attached. Perhaps it will be [a] month more before it is hatched. There are some of what I will call the clustered low blackberries on the sand just beyond the Dugan Desert. There are commonly a few larger grains in dense clusters on very short peduncles and flat on the sand, clammy with a cool subacid taste. Small rough sunflower, apparently two days.

I have seen a *few* new fungi within a week. The tobacco-pipes are still pushing up white amid the dry leaves, sometimes lifting a canopy of leaves with them four or five inches. Bartonia, apparently some days. Bunch-berries. Mountain sumach, apparently two or three days. *Nabalus albus*, apparently three or four days. Mulgedium, apparently four or five days.

Barn swallows still.

July 31. Blue-curls. Wood thrush still sings. *Desmodium rotundifolium*. *Lespedeza hirta*, say 26th, at Heywood Peak.

IX

AUGUST, 1854

(ÆT. 37)

Aug. 1. 6 A. M. On river. — *Bidens Beckii.* Bass probably out of bloom about a week. Corallorhiza, some days at Fair Haven Pond.

P. M. — To Peter's.

Sunflower. Meadow-haying begun for a week. Erechthites, begun for four or five days in Moore's Swamp. Two turtle doves in the stubble beyond. *Hieracium Canadense,* apparently a day or two. Do not see stamens of thyme-leaved pinweed, but *perhaps* petals. Ground-nut well out.

Aug. 2. *Wednesday.* Surveying in Lincoln.

Solidago lanceolata, two or three days. Decodon. *Polygonum arifolium* in swamp. *Chenopodium hybridum* probably now open. Surveyed east part of Lincoln.

5 P. M. — To Conantum on foot.

My attic chamber has compelled me to sit below with the family at evening for a month. I feel the necessity of deepening the stream of my life; I must cultivate privacy. It is very dissipating to be with people too much. As C. says, it takes the edge off a man's thoughts to have been much in society. I cannot

spare my moonlight and my mountains for the best of man I am likely to get in exchange.

I am inclined now for a pensive evening walk. Methinks we think of spring mornings and autumn evenings. I go *via* Hubbard Path. Chelone, say two days, at Conant's meadow beyond Wheeler's. July has been to me a trivial month. It began hot and continued drying, then rained some toward the middle, bringing anticipations of the fall, and then was hot again about the 20th. It has been a month of haying, heat, low water, and weeds. Birds have grown up and flown more or less in small flocks, though I notice a new sparrow's nest and eggs and perhaps a catbird's eggs lately. The woodland quire has steadily diminished in volume.

At the bass I now find that that memorable hum has ceased and the green berries are formed. . Now blueberries, huckleberries, and low blackberries are in their prime. The fever-bush berries will not be ripe for two or three weeks. At Bittern Cliff the *Gerardia quercifolia* (?), apparently four or five days at least. How interesting the small alternate cornel trees, with often a flat top, a peculiar ribbed and green leaf, and pretty red stems supporting its harmless blue berries inclined to drop off! The sweet viburnum, not yet turning. I see apparently a thistle-down over the river at Bittern Cliff; it is borne toward me, but when it reaches the rock some influence raises it high above the rock out of my reach. What a fall-like look the decayed and yellow leaves of the large Solomon's-seal have in the thickets now! These, with skunk-

cabbage and hellebore, suggest that the early ripeness of leaves, etc., has somewhat normal in it, — that there is a fall already begun. *Eupatorium sessilifolium*, one or two stamens apparently for two days; its smooth leaf distinguishes it by the touch from the sunflower.

I sat on the Bittern Cliff as the still eve drew on. There was a man on Fair Haven furling his sail and bathing from his boat. A boat on a river whose waters are smoothed, and a man disporting in it! How it harmonizes with the stillness and placidity of the evening! Who knows but he is a poet in his yet obscure but golden youth? Few else go alone into retired scenes without gun or fishing-rod. He bathes in the middle of the pond while his boat slowly drifts away. As I go up the hill, surrounded by its shadow, while the sun is setting, I am soothed by the delicious stillness of the evening, save that on the hills the wind blows. I was surprised by the sound of my own voice. It is an atmosphere burdensome with thought. For the first time for a month, at least, I am reminded that thought is possible. The din of trivialness is silenced. I float over or through the deeps of silence. It is the first silence I have heard for a month. My life had been a River Platte, tinkling over its sands but useless for all great navigation, but now it suddenly became a fathomless ocean. It shelved off to unimagined depths.

I sit on rock on the hilltop, warm with the heat of the departed sun, in my thin summer clothes. Here are the seeds of some berries in the droppings of some bird on the rock. The sun has been set fifteen minutes, and a long cloudy finger, stretched along the northern

horizon, is held over the point where it disappeared. I see dark shadows formed on the south side of the woods east of the river. The creaking of the crickets becomes clear and loud and shrill, — a sharp tinkling, like rills bubbling up from the ground. After a little while the western sky is suddenly suffused with a pure white light, against which the hickories further east on the hill show black with beautiful distinctness. Day does not furnish so interesting a ground. A few sparrows sing as in the morning and the spring; also a peawai and a chewink. Meanwhile the moon in her first quarter is burnishing her disk. Now suddenly the cloudy finger and the few scattered clouds glow with the parting salute of the sun; the rays of the sun, which has so long sunk below the convex earth, are reflected from each cloudy promontory with more incomparable brilliancy than ever. The hardhack leaves stand up so around the stem that now, at first starlight, I see only their light under sides a rod off. Do they as much by day?

The surface of the forest on the east of the river presents a singularly cool and wild appearance, — cool as a pot of green paint, — stretches of green light and shade, reminding me of some lonely mountain-side. The nighthawk flies low, skimming over the ground now. How handsome lie the oats which have been cradled in long rows in the field, a quarter of a mile uninterruptedly! The thick stub ends, so evenly laid, are almost as rich a sight to me as the graceful tops. A few fireflies in the meadows. I am uncertain whether that so large and bright and high was a fire-

fly or a shooting star. Shooting stars are but fireflies of the firmament. The crickets on the causeway make a *steady* creak, on the dry pasture-tops an *interrupted* one. I was compelled to stand to write where a soft, faint light from the western sky came in between two willows.

Fields to-day sends me a specimen copy of my "Walden." It is to be published on the 12th *inst.*

Aug. 4. *Friday.* P. M. —*Via* Turnpike to Smith's Hill.

A still, cloudy day with from time to time a gentle August rain. Rain and mist contract our horizon and we notice near and small objects. The weeds — fleabane, etc. — begin to stand high in the potato-fields, overtopping the potatoes. This hardhack interests me with its bedewed pyramid. Rue is out of bloom. Sicyos, apparently in a few days. The button-woods are much improved this year and may recover. Sonchus in one place out of bloom. Purple gerardia, by brook. The autumnal dandelion is now more common. *Ranunculus aquatilis* var. *fluviatilis,* white petals with a yellow claw, small flowers on surface of Hosmer's ditch, west end, by Turnpike. A new plant. Say July 1st. Is it open in sunny weather? The lower leaves of the sharp-angled lycopus are a dull red and those of the elodea are a fine, clear, somewhat crimson red. Fragrant everlasting. The swamp blackberry on high land, ripe a day or two. I hear the pigeon woodpecker still, — *wickoff, wickoff, wickoff, wickoff,* from a neighboring oak. See a late rose still in flower. On this hill (Smith's) the bushes are black with huckle-

berries. They droop over the rocks with the weight and are very handsome. Now in their prime. Some glossy black, some dull black, some blue; and patches of *Vaccinium vacillans* intermixed. *Hieracium paniculatum* in woods by Saw Mill Brook, a day or two. The leaves of some weeds, perhaps goldenrods, are eaten in a ribbon character like some strange writing apparently half-way through the leaf, often along the edge. This for some time. *Goodyera pubescens*, a day or two. *Hieracium scabrum*, apparently two or three days. It is already fall in low swampy woods where the cinnamon fern prevails. There are the sight and scent of beginning decay. I see a new growth on oak sprouts, three to six inches, with reddish leaves as in spring. Some whole trees show the lighter new growth at a distance, above the dark green. *Cannabis sativa.*

After sunset, a very low, thick, and flat white fog like a napkin, on the meadows, which ushers in a foggy night.

Aug. 5. Saturday. 8.30 A. M.— By boat to Coreopsis Bend.

A general fog in the morning, dispersed by 8 o'clock. At first the air still and water smooth, afterward a little breeze from time to time, — judging from my sail, from the north-northeast. A platoon of haymakers has just attacked the meadow-grass in the Wheeler meadow.

Methinks the river's bank is now [1] in its most in-

[1] *Vide* Aug. 15.

teresting condition. On the one hand are the light, lofty, and wide-spread umbels of the sium, pontederias already past their prime, white lilies perhaps not diminished in number, heart-leaf flowers, etc.; on the other the *Salix Purshiana*, full-foliaged, but apparently already *slightly* crisped and imbrowned or yellowed with heat, the button-bush in full blossom, and the mikania now covering it with its somewhat hoary bloom. The immediate bank is now most verdurous and florid, consisting of light rounded masses of verdure and bloom, and the river, slightly raised by the late rains, takes all rawness from the brim. Now, then, the river's brim is in perfection, after the mikania is in bloom and before the pontederia and pads and the willows are too much imbrowned, and the meadows all shorn. But already very many pontederia leaves and pads have turned brown or black. The fall, in fact, begins with the first heats of July. Skunk-cabbage, hellebores, convallarias, pontederias, pads, etc., appear to usher it in. It is one long acclivity from winter to midsummer and another long declivity from midsummer to winter. The mower's scythe, however, spares a fringe of to him useless or noxious weeds along the river's edge, such as sium, wool-grass, various sedges and bulrushes, pontederias, and polygonums. The pontederia leaves have but a short life, the spring so late and fall so early. Smaller flowers I now observe on or by the river are yellow lilies, both kinds; the larger polygonum (*hydropiperoides*), with slender white spikes, and the small front-rank rose-colored one; the *Bidens Beckii*, three to six or seven

inches above the surface, on that very coarse, stout-stemmed, somewhat utricularia-like weed which makes dense beds in the water; the three water utricularias especially the purple; the cardinal-flower; water asclepias; and a few late roses. As I go past the white ash, I notice many small cobwebs on the bank, shelf above shelf, promising a fair day.

I find that we are now in the midst of the meadow-haying season, and almost every meadow or section of a meadow has its band of half a dozen mowers and rakers, either bending to their manly work with regular and graceful motion or resting in the shade, while the boys are turning the grass to the sun. I passed as many as sixty or a hundred men thus at work to-day. They stick up a twig with the leaves on, on the river's brink, as a guide for the mowers, that they may not exceed the owner's bounds. I hear their scythes cronching the coarse weeds by the river's brink as I row near. The horse or oxen stand near at hand in the shade on the firm land, waiting to draw home a load anon. I see a platoon of three or four mowers, one behind the other, diagonally advancing with regular sweeps across the broad meadow and ever and anon standing to whet their scythes. Or else, having made several bouts, they are resting in the shade on the edge of the firm land. In one place I see one sturdy mower stretched on the ground amid his oxen in the shade of an oak, trying to sleep; or I see one wending far inland with a jug to some well-known spring.

There is very little air stirring to-day, and that seems to blow which way it listeth. At Rice's Bend the river

is for a long distance clogged with weeds, where I think my boat would lodge in midstream if I did not more than guide it. The potamogeton leaves almost bridge it over, and the bur-reed blades rise a foot or more above the surface. The water weeps, or is strained, through. Though yesterday was rainy, the air to-day is filled with a blue haze. The coreopsis is (many) fairly but yet freshly out, I think not more than a week, from one foot to a foot and a half high, some quite white, commonly the petals reflexed a little, just on the edge of or in the water. The meadow-grass not yet cut there. In crossing the meadow to the Jenkins Spring at noon, I was surprised to find that the dew was not off the deep meadow-grass, but I wet the legs of my pants through. It does not get off, then, during the day. I hear these days still those familiar notes — of a vireo? — *somewhat* peawai-like, — two or more, *whe-tar che.* Near Lee's (returning), saw a large bittern, pursued by small birds, alight on the shorn meadow near the pickerel-weeds, but, though I rowed to the spot, he effectually concealed himself.

Now Lee and his men are returning to their meadow-haying after dinner, and stop at the well under the black oak in the field. I too repair to the well when they are gone, and taste the flavor of black strap on the bucket's edge. As I return down-stream, I see the haymakers now raking with hand or horse rakes into long rows or loading, one on the load placing it and treading it down, while others fork it up to him; and others are gleaning with rakes after the forkers. All farmers are anxious to get their meadow-hay as

soon as possible for fear the river will rise. On the 2d, Hagar told me he had done all his haying, having little or no meadow, and now the chief business was to kill weeds in the orchard, etc. Formerly they used to think they had nothing to do when the haying was done and might go a-fishing for three weeks.

I see very few whorled or common utricularias, but the purple ones are exceedingly abundant on both sides the river, apparently from one end to the other. The broad pad field on the southwest side of Fair Haven is distinctly purpled with them. Their color is peculiarly high for a water plant. In Sudbury the huckleberries, etc., appeared to be dried up. At Lee's Cliff, I meet in the path a woodchuck, — probably [a] this year's one, — which stood within seven feet and turned the side of its head to me as if deaf of one ear, and stood listening till I advanced. A very large flock of blackbirds, — perhaps grackles and cowbirds and maybe (?) young red-wings, — with a roar of wings, flying from this side the river to that and alighting on the sedge and willows and ground.

Aug. 6. P. M. — To Tarbell Hills by boat.

Rather cool with a strong wind, before which we glide. The rippled surface of the water and the light under sides of the white maples in rounded masses bordering the stream, and also the silvery tops of the swamp white oaks, give a pleasing breezy aspect to the shores, etc. Surprised to see the hibiscus just out nearer Flint's and also at Ball's Hill Bend. Apparently always earlier in those places. I noticed yesterday

that the fields of *Juncus militaris* on the south side of Fair Haven showed a stripe six or eight inches wide next the water and bounded by a very level line above of a different color, more or less reddish or as if wet, as if there had been a subsidence of the water to that extent. Yet it has actually risen, rather. The sun is quite hot to-day, but the wind is cool and I question if my thin coat will be sufficient. Methinks that after this date there is commonly a vein of coolness in the wind. The Great Meadows are for the most part shorn. Small light-green sensitive ferns are springing up full of light on the bank. I see some smaller white maples turned a dull red, — crimsonish, — a slight blush on them. Grape-vines, the downy under sides of their leaves turned up by the wind,[1] are methinks more conspicuous now at a distance along the edge of the meadow, where they round and mass the trees and bushes, — long, irregular bowers, here and there marked with the white, downy under sides of the leaves. The wind is very unsteady and flirts our sail about to this side and that. We prefer to sail to-day (Sunday) because there are no haymakers in the meadow.

Landed at Tarbell's Hills. I am more pleased with the form of the ground there than with anything else, — with the huckleberry hills, and hollows, the cow-paths, and perhaps the old corn-hills. There are very agreeable slopes and undulations, and the light is very agreeably reflected from the barren surface of the earth. It is at length cloudy, and still behind the hills, and very grateful is this anticipation of the fall, —

[1] *Vide* Aug. 20.

coolness and cloud, and the crickets steadily chirping in mid-afternoon. The huckleberries are somewhat shrivelled and drying up. As I look westward up the stream, the oak, etc., on Ponkawtasset are of a very dark green, almost black, which, methinks, they have worn only since midsummer. Has this anything to do with the bluish mistiness of the air? or is it an absolute deepening of their hue? We row back with two big stones in the stern. Interesting here and there the tall and slender zizania waving on the shore, with its light panicle eighteen inches or more in length.

Aug. 7. It is inspiriting at last to hear the wind whistle and moan about my attic, after so much trivial summer weather, and to feel cool in my thin pants.

Do you not feel the fruit of your spring and summer beginning to ripen, to harden its seed within you? Do not your thoughts begin to acquire consistency as well as flavor and ripeness? How can we expect a harvest of thought who have not had a seed-time of character? Already some of my small thoughts — fruit of my spring life — are ripe, like the berries which feed the first broods of birds; and other some are prematurely ripe and bright, like the lower leaves of the herbs which have felt the summer's drought.

Seasons when our mind is like the strings of a harp which is swept, and we stand and listen. A man may hear strains in his thought far surpassing any oratorio.

Sicyos.

P. M. — To Peter's, Beck Stow's, and Walden.

Liatris. Still autumnal, breezy with a cool vein in

the wind; so that, passing from the cool and breezy into the sunny and warm places, you begin to love the heat of summer. It is the contrast of the cool wind with the warm sun. I walk over the pinweed-field. It is just cool enough in my thin clothes. There is a light on the earth and leaves, as if they were burnished. It is the glistening autumnal side of summer. I feel a cool vein in the breeze, which braces my thought, and I pass with pleasure over sheltered and sunny portions of the sand where the summer's heat is undiminished, and I realize what a friend I am losing. The pinweed does not show its stamens —I mean the *L. thymifolia.* It was open probably about July 25. This off side of summer glistens like a burnished shield. The waters now are some degrees cooler. Winds show the under sides of the leaves. The cool nocturnal creak of the crickets is heard in the mid-afternoon. Tansy is apparently now in its prime, and the early goldenrods have acquired a brighter yellow. From this off side of the year, this imbricated slope, with alternating burnished surfaces and shady ledges, much more light and heat are reflected (less absorbed), methinks, than from the springward side. In mid-summer we are of the earth, — confounded with it, — and covered with its dust. Now we begin to erect ourselves somewhat and walk upon its surface. I am not so much reminded of former years, as of existence prior to years.

From Peter's I look over the Great Meadows. There are sixty or more men in sight on them, in squads of half a dozen far and near, revealed by their white

shirts. They are alternately lost and reappear from behind a distant clump of trees. A great part of the farmers of Concord are now in the meadows, and toward night great loads of hay are seen rolling slowly along the river's bank, — on the firmer ground there, — and perhaps fording the stream itself, toward the distant barn, followed by a troop of tired haymakers.

The very shrub oaks and hazels now look curled and dry in many places. The bear oak acorns on the former begin to be handsome. Tansy is in *full blaze* in some warm, dry places. It must be time, methinks, to collect the hazelnuts and dry them; many of their leaves are turned. The Jersey tea fruit is blackened. The bushy gerardia is apparently out in some places. Blueberries pretty thick in Gowing's Swamp. Some have a slightly bitterish taste.

A wasp stung me at one high blueberry bush on the forefinger of my left hand, just above the second joint. It was very venomous; a white spot with the red mark of the sting in the centre, while all the rest of the finger was red, soon showed where I was stung, and the finger soon swelled much below the joint, so that I could not completely close the finger, and the next finger sympathized so much with it that at first there was a *little* doubt which was stung. These insects are effectively weaponed. But there was not enough venom to prevail further than the finger.

Trillium berry.

Aug. 8. P. M. — To Annursnack *via* Assabet.

A great spider three quarters of an inch long, with

large yellow marks on the sides, in middle of a flat web. This is a day of sunny water. As I walk along the bank of the river, I look down a rod and see distinctly the fishes and the bottom. The cardinals are in perfection, standing in dark recesses of the green shore, or in the open meadow. They are fluviatile, and stand along some river or brook, like myself. I see one *large white* maple crisped and tinged with a sort of rosaceous tinge, just above the Golden Horn. The surface is very glassy there. The foliage of most trees is now not only most dense, but a very dark green, — the swamp white oak, clethra, etc. The *Salix Purshiana* is remarkable for its *fine* and narrow leaves, — feathers, — of a very light or yellowish green, as if finely cut, against the dark green of other trees, yet not drooping or curved downward, but remarkably concealing its stems. Some silky cornel leaves are reddish next water. Very many leaves on hills are crisped and curled with drought. Black cherry ripe. The meadow-hay is sprinkled here and there on the river. On Annursnack I scare up many turtle doves from the stubble. Hear a supper horn — J. Smith's? — far away, blown with a long-drawn blast, which sounds like a strain of an æolian harp. The distance has thus refined it. I see some slight dun clouds in the east horizon, — perhaps the smoke from burning meadows.

Aug. 9. *Wednesday.* — To Boston.

"Walden" published. Elder-berries. Waxwork yellowing.

Aug. 10. 4.30 A. M. — To Cliffs.

A high fog. As I go along the railroad, I observe the darker green of early-mown fields. A cool wind at this hour over the wet foliage, as from over mountain-tops and uninhabited earth. The large primrose conspicuously in bloom. Does it shut by day? The woods are comparatively still at this season. I hear only the faint peeping of some robins (a few song sparrows on my way), a wood pewee, kingbird, crows, before five, or before reaching the Springs. Then a chewink or two, a cuckoo, jay, and later, returning, the *link* of the bobolink and the goldfinch. That is a peculiar and distinct hollow sound made by the pigeon woodpecker's wings, as it flies past near you. The *Aralia nudicaulis* is another plant which for some time, and perhaps more generally than any, yellows the forest floor with its early fall, or turning, as soon as its berries have ripened, along with hellebore, skunk-cabbage, convallarias, etc. Ambrosia. At length, as I return along the back road, at 6.30, the sun begins to eat through the fog.

The tinkling notes of goldfinches and bobolinks which we hear nowadays are of one character and peculiar to the season. They are not voluminous flowers, but rather nuts, of sound, — ripened seeds of sound. It is the tinkling of ripened grains in Nature's basket. It is like the sparkle on water, — a sound produced by friction on the crisped air.

For a day or two I have inclined to wear a thicker, or fall, coat.

P. M. — Clematis Brook *via* Conantum.

A cloudy afternoon and rather cool, but not threatening rain soon. Dangle-berries ripe how long? — one of the handsomest berries.

On the southwest side of Conant's Orchard Grove, saw from twenty rods off some patches of purple grass,[1] which painted a stripe of hillside next the woods for half a dozen rods in length. It was as high-colored and interesting, though not so bright, as the patches of rhexia. On examination I found it to be a kind of grass a little less than a foot high, with but few green blades and a fine spreading purple top in seed; but close at hand it was but a dull purple and made but little impression on the eye, was even difficult to detect where thin. But, viewed in a favorable light fifteen rods off, it was of a fine lively purple color, enriching the earth very much. It was the more surprising because grass is commonly of a sombre and humble color. I was charmed to see the grass assume such a rich color and become thus flower-like. Though a darker purple, its effect was similar to that of the rhexia.[2]

Hardly any dog-days yet. The air is quite clear now. *Aster macrophyllus* near beaked hazel by roadside, some time. That sort of sweet-william (?) pink, with viscidness below the joints, but not pubescent, against the Minott house; how long?

The *Arum triphyllum* fallen some time and turned

[1] *Poa hirsuta* according to Russell, now in bloom, abundant; in the J. Hosmer hollow.

[2] [*Excursions*, p. 252; Riv. 309. There the name of the grass appears as *Eragrostis pectinacea*.]

quite white. *Asclepias Cornuti* leaves begun to yellow; and brakes, etc. *Rhus Toxicodendron* along the Minott house ditch in the midst of its fall, almost all its leaves *burnt brown* and partly yellow.

First muskmelon in garden.

Mr. Loomis says that he saw a mockingbird at Fair Haven Pond to-day.

Aug. 11. P. M. — To Assabet Bath.

I have heard since the 1st of this month the *steady* creaking cricket. Some are digging early potatoes. I notice a new growth of red maple sprouts, small reddish leaves surmounting light-green ones, the old being dark-green. Green lice on birches. *Aster Tradescanti*, two or three days in low ground; flowers smaller than *A. dumosus*, densely racemed, with short peduncles or branchlets, calyx-scales narrower and more pointed. *Ammannia humilis* (?) (a new plant), perhaps three weeks at northeast end of Wheeler's brush fence meadow, like an erect isnardia, *i. e. Ludwigia palustris*, with small wrinkled yellowish petals with a purplish vein.

Aug. 12. *Saturday.* Watermelon.

P. M. — To Conantum by boat.

Methinks I heard a few toads till about the middle of July. To-day there is an uncommonly strong wind, against which I row, yet in shirt-sleeves, trusting to sail back. It is southwest. I see twelve painted tortoises on a rail only five feet long, and perhaps some were scared off before I observed them. The *Bidens*

Beckii yellows the side of the river just below the Hubbard Path, but is hardly yet in fullest flower generally. I see goldfinches nowadays on the lanceolate thistles, apparently after the seeds. It takes all the heat of the year to produce these yellow flowers. It is the 3 o'clock P. M. of the year when they begin to prevail, — when the earth has absorbed most heat, when melons ripen and early apples and peaches. The cranberry cheeks begin to redden. *Viburnum dentatum* berries. Hazelnut husks now have a reddish edge, being ripe. Is not this a sign? It is already the yellowing year.

Viburnum nudum berries generally green, but some, higher and more exposed, of a deep, fiery pink on one cheek and light green on the other, and a very few dark purple or without bloom, black already. I put a bunch with only two or three black ones in my hat, the rest pink or green. When I got home more than half were turned black, — and ripe!! A singularly sudden chemical change. Another cluster which had no black ones was a third part turned. It is surprising how very suddenly they turn from this deep pink to a very dark purple or black, when the wine which they contain is mature. They are a very pretty, irregularly elliptical berry, one side longer than the other, and particularly interesting on account of the mixture of light-green, deep-pink, and dark-purple, and also withered berries, in the same cyme.

The wind is autumnal and at length compels me to put on my coat. I bathe at Hubbard's. The water is rather cool, comparatively. As I look down-stream

from southwest to northeast, I see the red under sides of the white lily pads about half exposed, turned up by the wind to [an] angle of 45° or more. These hemispherical red shields are so numerous as to produce a striking effect on the eye, as of an endless array of forces with shields advanced; sometimes four or five rods in width. Off Holden Woods a baffling counter wind as usual (when I return), but looking up-stream I see the great undulations extending into the calm from above, where the wind blows steadily. I see no maples changed yet along this stream. There are but few haymakers left in the meadows.

On Conantum saw a cow looking steadily up into the sky for a minute. It gave to her face an unusual almost human or wood-god, faun-like expression, and reminded me of some frontispieces to Virgil's Bucolics. She was gazing upward steadily at an angle of about 45°. There were only some downy clouds in that direction. It was so unusual a sight that any one would notice it. It suggested adoration.

The woodbine on rocks in warm and dry places is now more frequently turned, a few leafets bright-scarlet.

The now quite common goldenrods fully out are what I have called *stricta* and also the more strict *puberula* (?). The *arguta* and *odora* are not abundant enough to make an impression. The *Solidago nemoralis* is not yet generally out. The common asters now are the *patens*, *dumosus*, *Radula*, and *Diplopappus umbellatus*. This is a famous year for huckleberries, etc. They are now drying up for the most part before spoiling.

The bushes on Conantum are quite black with them. They are clustered like *Vaccinium vacillans* apparently. High blackberries are in prime. And I see some great low blackberries on long peduncles, lifted above the huckleberries, composed of great grains, as large as the largest high blackberries. Poke berries, also poke stems, are purple; not yet peduncles. Plucked a small *Hieracium scabrum*, hairy, which I may have called *Gronovii*.

I think I should not notice the shadow of Conantum Cliff now; perhaps because the grass is so sere and russet. It should be a tender green.

For birds: —

I think that I begin to see a few more hawks than of late. A white-rumped to-day.
Partridges fly in packs.
Bluebirds sound oftener plaintively.
Larks are still seen.
Blackbirds fly in great flocks.
Robin peeps occasionally.
Song sparrow sings clearly in morning, etc.
Hear pigeon woodpecker's *wickoff* still occasionally.
Pigeons begin to be seen.
Hear rush sparrow still.
No seringos for some time.
Turtle doves common in small flocks in stubble.
White-bellied swallows still.
Barn swallows still.
Perhaps chip-sparrows are silent.
Have not heard a wood thrush since last week of July.
Catbird and thrasher done singing.
Chewink still heard.
Wood pewee "
No night-warbler,[1] or tweezer, or evergreen-forest note; nor veery.

[1] Hear one at evening, Aug. 14.

Kingbird twitters still.
No red-eyes[1] nor tanagers heard since 5th.
Goldfinch common.
Cherry-bird heard.
Cuckoo.
Gold robin sometimes heard partially.[2]

Aug. 13. First *marked* dog-day; sultry and with misty clouds. For ten days or so we have had comparatively cool, fall-like weather.

I remember only with a pang the past spring and summer thus far. I have not been an early riser. Society seems to have invaded and overrun me. I have drank tea and coffee and made myself cheap and vulgar. My days have been all noontides, without sacred mornings and evenings. I desire to rise early henceforth, to associate with those whose influence is elevating, to have such dreams and waking thoughts that my diet may not be indifferent to me.

P. M. — To Bare Hill, Lincoln, *via* railroad.

I have not chanced to hear the bullfrogs trump much, if any, since the middle of July. This is a quite hot day again, after cooler weather. A *few* small red maples about[3] blush now a dull red. For about a month I think I have particularly noticed the light under sides of leaves, especially maples. I see small flocks of grass-birds, etc. In Macintosh's field (pasture),

[1] Hear one to-day.

[2] The nighthawk squeaks at sunset and the whip-poor-will sings, Aug. 14. The screech owl screams at evening.

[3] Pond? [This, written in pencil, evidently at a later date, seems to indicate that at the time he inserted it he had forgotten just where the trees were.]

some dwarf acalypha some time out. The erechthites down begins to fly. Some of these plants are six feet high. I see where the pasture thistles have apparently been picked to pieces (for their seeds? by the goldfinch?), and the seedless down strews the ground.

Huckleberries begin to be wormy, but are still sound on Bare Hill. Now the mountains are concealed by the dog-day haze, and the view is of dark ridges of forest, one behind the other, separated by misty valleys. Squirrels have begun to eat hazelnuts, and I see their dry husks on the ground turned reddish-brown.

The change, decay, and fall of the brakes in woods, etc., is perhaps more autumnal than any sight. They make more show than the aralia. Some are quite brown and shrivelled, others yellow, others yellow and brown, others yellow, brown, and green, making a very rich and parti-colored or checkered work, as of plaited straw, — bead or straw work or ivory; others are still green with brown spots. In respect to these and many other plants of this size and habit, it is already fall. They stand yellow and yellowing all through the woods, — none perhaps so conspicuous as the brake. At Thrush Alley, was surprised to behold how many birch leaves had turned yellow, — every other one, — while clear, fresh, leather-colored ones strewed the ground with a pretty thick bed under each tree. So far as the birches go it is a perfect autumnal scene there.

Aug. 14. No rain, — only the dusty road spotted with the few drops which fell last night, — but there

is quite a high and cool wind this morning. Since August came in, we have begun to have considerable wind, as not since May, at least. The roads nowadays are covered with a light-colored, powdery dust (this yesterday), several inches deep, which also defiles the grass and weeds and bushes, and the traveller is deterred from stepping in it. The dusty weeds and bushes leave their mark on your clothes.

Mountain-ash berries orange (?), and its leaves half yellowed in some places.

3 P. M. — To climbing fern with E. Hoar.

It takes a good deal of care and patience to unwind this fern without injuring it. Sometimes same frond is half leaf, half fruit. E. talked of sending one such leaf to G. Bradford to remind him that the sun still shone in America. The uva-ursi berries beginning to turn.

6 P. M. — To Hubbard Bath and Fair Haven Hill.

I notice now that saw-like grass [1] seed where the mowers have done. The swamp blackberries are quite small and rather acid. Though yesterday was quite a hot day, I find by bathing that the river grows steadily cooler, as yet for a fortnight, though we have had no rain here. Is it owing solely to the cooler air since August came in, both day and night, or have rains in the southwest cooled the stream within a week? I now, standing on the shore, see that in sailing or floating down a smooth stream at evening it is an advantage to the fancy to be thus slightly separated from

[1] *Paspalum ciliatifolium.*

the land. It is to be slightly removed from the commonplace of earth. To float thus on the silver-plated stream is like embarking on a train of thought itself. You are surrounded by water, which is full of reflections; and you see the earth at a distance, which is very agreeable to the imagination.

I see the blue smoke of a burning meadow. The clethra must be one of the most conspicuous flowers not yellow at present. I sit three-quarters up the hill. The crickets creak strong and loud now *after sunset.* No word will spell it. It is a short, strong, regular ringing sound, as of a thousand exactly together, — though further off some alternate, — repeated regularly and in rapid time, perhaps twice in a second. Methinks their quire is much fuller and louder than a fortnight ago. Ah! I need solitude. I have come forth to this hill at sunset to see the forms of the mountains in the horizon, — to behold and commune with something grander than man. Their mere distance and unprofanedness is an infinite encouragement. It is with infinite yearning and aspiration that I seek solitude, more and more resolved and strong; but with a certain genial weakness that I seek society ever. I hear the nighthawk squeak and a whip-poor-will sing. I hear the tremulous squealing scream of a screech owl in the Holden Woods, sounding somewhat like the neighing of a horse, not like the snipe. Now at 7.45, perhaps a half-hour after sunset, the river is quite distinct and full of light in the dark landscape, — a silver strip of sky, of the same color and brightness with the sky. As I go home by Hayden's I smell the burning

meadow. I love the scent. It is my pipe. I smoke the earth.

Aug. 15. *Tuesday.* 5.15 A. M. — To Hill by boat. By 5.30 the *fog* has withdrawn from the channel here and stands southward over the Texas Plain, forty or fifty feet high.

Some birds, after they have ceased to sing by day, continue to sing faintly in the morning now as in spring. I hear now a warbling vireo, a robin (half strain), a golden robin whistles, bluebirds warble, pigeon woodpecker; not to mention the tapping of a woodpecker and the notes of birds which are heard through the day, as wood peawai, song sparrow, cuckoo, etc. On the top of the Hill I see the goldfinch eating the seeds (?) of the Canada thistle. I rarely approach a bed of them or other thistles nowadays but I hear the cool twitter of the goldfinch about it. I hear a red squirrel's reproof, too, as in spring, from the hickories. Now, just after sunrise, I see the western steeples with great distinctness, — tall white lines. The fog eastward over the Great Meadows appears indefinitely far, as well as boundless. Perhaps I refer it to too great a distance. It is interesting when the fluviatile trees begin to be seen through it and the sun is shining above it. By 6 o'clock it has risen up too much to be interesting.

The button-bush is now nearly altogether out of bloom, so that it is too late to see the river's brink in its perfection. It must be seen between the blooming of the mikania and the going out of bloom of the button-

bush, before you feel this sense of lateness in the year, before the meadows are shorn and the grass of hills and pastures is thus withered and russet.

9 A. M. — Walk all day with W. E. C., northwest into Acton and Carlisle.

A dog-day, comfortably cloudy and cool as well as still. The river meadows, where no mowing, have a yellowish and autumnal look, especially the wool-grass. I see large flocks of bobolinks on the Union Turnpike. Are the darker ones with some yellowish (?) on side heads young red-wings or male bobolinks changing? Forded the Assabet at the bathing-place. Saw carrion-flower berries just begun to turn; say in a day or two. Panicled cornel berries on College Road. Many of the trees in Barrett's orchard on Annursnack touch the ground all around like a dish cover, weighed down with fruit, and the branches are no thicker over head than around. Is not this the best form for an apple tree, — a hollow hemisphere nearly resting on the earth, the branches equally dispersed over the superficies, and light and air equally admitted? Hills and pastures are now dry and slippery. They seem as completely russet as in winter. I associate the mist of this dog-day with the burning of meadows. Crossed from top of Annursnack to top of Strawberry Hill, past a pigeon-bed. Measured the great chestnut. At about seven feet from ground, the smallest place I could find, it is $14\frac{3}{4}$ feet in circumference; at six feet from ground, $15\frac{1}{12}$ feet in circumference; at

five feet, $15\frac{4}{12}$; at one foot from ground not including some bulgings, 22 feet in circumference. It branches first at about nine feet from ground. The top has some dead limbs and is not large in proportion to trunk. There are great furrows in the bark. *Desmodium Marylandicum* on Strawberry Hill by wall, some days out. We took our dinner on the north side of the wall on top of the Hill. The dog-day haze conceals the distant hills and mountains, but some new and nearer elms, etc., stand out with new distinctness against it.

It is remarkable how far and widely the smoke of a meadow burning is visible, and how hard to locate. That in the meadow near Joe Merriam's,[1] half a dozen miles off, which has lasted some days, appears to possess the whole east horizon, as if any man who lived two or three miles east of this must smell it and know all about [it], but most who live within a mile of it may not have noticed it. It impresses me as if all who dwelt in the eastern horizon must know of it and be interested in it, — as if it were a sort of public affair and of moment to a whole town, — yet hardly the next neighbors observe it, and the other day, when I passed within half a mile of it, it did not make nearly so great a show as from this very distant eminence. The white smoke is now seen slanting upward across half a township and gradually mingled and confounded with the haze of the day, so that it may even seem to have produced the latter. West, by Nagog, is a dense dark, almost black smoke, and another less dark in the south. The owner of the meadow little thinks how

[1] It is the Brooks meadow on fire. *Vide* Aug. 23.

far the smoke of his burning is seen by the inhabitants of the country and by travellers, filling their horizon and giving a character to their day, shutting out much sky to those who dwell half a dozen miles away. So far a man's deformities are seen by and affect his fellows. They help to blot out the sky to those [who] dwell far away.

Looking from this Strawberry Hill to the long range behind William Brown's, northeast by east, I see that it and other hills are marked finely by many parallel lines, apparently the edges of so many terraces, arranging the crops and trees in dark lines, as if they were the traces of so many lake-shores. Methinks this is an almost universal phenomenon. When farthest inland we are surrounded by countless shores or beaches, terrace above terrace. It is the parallelism of green trees, bushes, and crops which betrays them at a distance. The locomotive whistle, far southwest, sounds like a bell. *Lycopodium dendroideum* pollen, apparently some days.

From this hill we steered northeast toward the east point of a wood in the direction of Hutchinson's, perhaps two miles off. Before starting on this walk I had studied the map to discover a new walk, and decided to go through a large wooded tract west and northwest of the Paul Dudley house, where there was no road, there at last to strike east across the head of Spencer Brook Meadow, perhaps to the old Carlisle road. A mile and a half northeast of Strawberry Hill, two or three large and very healthy and perfect sassafras trees (three large at least), very densely clothed

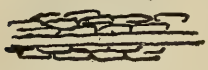
with dark-green lemon (?) or orange (?) tree shaped leaves, singularly healthy. This half a mile or so west of the Dudley house. Comparatively few of the leaves were of the common form, *i. e.* three-lobed, but rather simple. There was much mountain sumach close by, turning scarlet, and sweet-ferns also browning and yellowing. Keeping on through a somewhat swampy upland, we fell into a path, which Channing preferring, though it led us through woods widely out of our course westward, I soon corrected it, and, descending through swampy land, at length saw through the trees and bushes into a small meadow completely surrounded by woods, in which was a man haying only eight or ten rods off. We felt very much like Indians stealing upon an early settler, and naturally inclined to one side to go round the meadow through the high blueberry bushes. The high blueberries were from time to time very abundant, but have acquired a dead and flat taste, lost their raciness. Soon after, we followed an indistinct path through a dense birch wood, leading quite out of our course, *i. e.* westward. We were covered from head to foot with green lice from the birches, especially conspicuous on dark clothes, but going through other woods soon brushed them off again.

At length, when I endeavored to correct my course by compass, it pointed so that I lost my faith in it, and we continued to go out of our way, till we came out on a side-hill immediately overlooking a stream and mill and several houses and a small mill-pond undoubtedly on the Nashoba in the northern part of

Acton, on the road to Chelmsford. We were completely lost, and saw not one familiar object. At length saw steeples which we thought Westford, but the monument proved it Acton. Took their bearings, calculated a new course, and pursued it at first east-northeast, then east, and finally southeast, along rocky hillsides covered with weeds, where the fall seemed further advanced than in Concord, with more autumnal colors, through dense oak woods and scrub oak, across a road or two, over some pastures, through a swamp or two, where the cinnamon fern was as high as our heads and the dogwood, now fruiting, was avoided by C. After travelling about five miles, for the most part in woods, without knowing where we were, we came out on a hill from which we saw, far to the south, the open valley at head of Spencer Brook.

In the meanwhile we came upon another pigeon-bed, where the pigeons were being baited, a little corn, etc., being spread on the ground, and, [as ?] at the first, the bower was already erected. What I call *Solidago arguta* is exceedingly handsome, a pyramidal head with rather horizontal branchlets with a convex surface of erect flowers; quite a splendid flower it would be in a garden. *Aster miser.* In Carlisle, on high land, that kind of viburnum with smaller, darker (with rusty patches), and less oblong berries and more obtuse leaves (at both ends), — a large spreading bush eight or nine feet high at least. Russell said it was the *V. prunifolium*, but the leaves are not sharply serrate but nearly entire, only crenate at most, commonly short and broad, the peduncle not half an inch long.

At evening, Mr. Russell showed his microscope at Miss Mackay's. Looked at a section of pontederia



leaf. Saw what answered to the woody fibre and the cells on each side, also the starch in potato, lime in rhubarb, fern seeds (so called), and lichen ditto, of which last there were fifty or sixty in one little wart o o this size. The power of this glass was nine hundred diameters. All the objects were transparent and had a liquid look, crystalline, and reminded me of the moon seen through a telescope. They suggested the significance or insignificance of size, and that the moon itself is a microscopic object to us, so little it concerns us.

Aug. 16. 8 A. M. — To climbing fern with John Russell.

He says that my winkle fungus is a *Boletus* of Linnæus, *Polyporus* of others, *Auricularia* (ear-like) now. My beautiful purple grass, now in flower, the *Poa hirsuta.*

Peppermint has just begun. Walked along the Dennis shore. That sedge by edge of river with three-ranked linear leaves is *Dulichium spathaceum.* My wool-grass is a trichophorum. Says that in Chelmsford they rub the pigeon bait with the *Solidago odora* to

attract pigeons. That fuzzy-topped sedge with slender spikes in straw-colored ovate heads, arranged umbel-like, he thought *Scirpus* (probably *Cyperus*) *strigosus. Aster puniceus,* a day or two. That saw-like spiked grass which is an autumnal

sight in the mown fields is *Paspalum ciliatifolium*. Choke-cherry leaves are now many reddened. *Scirpus capillaris*, turned yellow, only two or three inches high, now covers the sand on Lupine Hill. A bluet still. *Aster longifolius*, a day or two. A pear-formed puff-ball (*Lycoperdon*), in Yellow Thistle Meadow, now dry, buff-colored.

That concave, chocolate-colored one I have is a *Lycoperdon bovi*(something),—

from being in pastures. That potamogeton in Nut Meadow Brook at the watering-place beyond Jenny's is *P. Claytoni*, with many long, linear, pellucid immersed leaves half an inch wide and some floating. My stag-horn lichen is the [*Parmelia*] *Borreri*. The former grows on the ground and is more like a cladonia. *Aster lævis*, two or three days, if I have not mentioned it before. *Hypnum riparium* in the Harrington trough. *Viola pedata* again. Uva-ursi berries reddened, but R. says not ripe or soft till spring. Saw the variolaria on the white pines on Harrington Road, and opegrapha, like Arab characters. Showed me the Prussian eagle in the stem of the brake. *Aster corymbosus* (?), some time by this road. (Russell thought it *cordifolius*, but the flowers are white and petioles not winged.) In the T. Wheeler pasture, showed me the *Cladonia rangiferina* (the common white one), the *C. sylvestris* (the green one with it), also the *furcata*, and spoke of the *alpina* as common in woods.

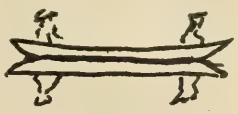
This day and yesterday, and when I was last on the river, the wind rose in the middle of the day, blow-

ing hardest at noon, — quite hard, — but went down toward night. Pointed out an *Erigeron strigosus* without rays. He had read of it as a variety. Some had small rays, leaves narrower. Above Rogers house, on right.

P. M. — With Russell to Fair Haven by boat.

That coarse, somewhat *B. Beckii*-looking weed, standing upright under water in the river, is hornwort (*Ceratophyllum echinatum*). That moss on the button-bushes is a fontinalis or else dichelyma. A coarser species is on the bridges. Cannot see the fruit now for some reason. On the rock at Bittern Cliff, the *Parmelia detonsa*. R. mistook a black pony in the water with a long mane behind some weeds for a heron. *Nuphar lutea* pads nearly all eaten, mere skeletons remaining. Saw where a partridge had dusted herself at a woodchuck's hole. Methinks that for about three weeks past the light under sides of the upper leaves of maples, swamp oak, etc., etc., have been permanently conspicuous, while in June to middle of July they were observable only when there was more wind than usual. As if, owing to the dry weather and heat, those leaves were permanently held up, like those of the hardhack, etc., — various weeds and shrubs on dry land, — perhaps had risen in the night and had not vitality enough to fall again. Now, accordingly, I see the dark-green upper sides of the lower leaves alone, and various agreeable shades of green thence upward. Now is the season to observe these various shades, especially when the sun is low in the west. At the steam-mill

sand-bank was the distinct shadow of our shadows, — first on the water, then the double one on the bank bottom to bottom, one being upside down, — three in all, — one on water, two on land or bushes. R. showed me the ginseng in my collection. Thinks that one of my Maine asters is a northern form of the *cordifolius*.



No haymakers in meadows now.

Prince's-feathers, how long? Woodcock in garden. *Polygonum dumetorum* at Bittern Cliff.

Aug. 18. Warbling vireo in morning, — one.

Russell thought it was the *Salix discolor* or else *eriocephala* which I saw, not *sericea*, which is not common; also that my cone-bearing one was *S. humilis*. Barratt the best acquainted with them. That the *Rubus triflorus* was badly described. That we had three gooseberries, — the common smooth, the prickly fruited, and the prickly branched. Said we had two strawberries, the *Virginiana* and the *vesca*, — the last not uncommon. That the *Thalictrum dioicum* was only about a foot high. That the seed of flowering fern was heavy, and hence it fell in circles and so grew. That the *Cratægus Crus-Galli* was a variety of the white thorn. Best time for seaside flowers middle of July, for White Mountains 4th of July. Robbins of Uxbridge best acquainted now with the potamogetons. Tuckerman thought it would be impossible to arrange them at present, European specimens being inaccessible or fragmentary. That the smaller sparganium

was my taller one of the river and should rather be called *minor*, being only narrower. That we had but one urtica hereabouts. Of the rose-colored water-lily in a pond-hole in Barnstable, into which Parker stripped and went; and the farmer dug it all up and sold it. The Spanish moss is a lily, — *Tillandsia*, — so named by Linnæus because it dislikes moisture as much as his friend Tillands the sea. All these spots on my collection of leaves — crimson, etc. — are fungi. The transparent globes on the hornwort are an alga, — *Nostoc*.

Almost impossible to find fishworms now it is so dry. I cannot find damp earth anywhere but where there is water on the surface or near.

P. M. — Over Great Meadows.

A great drought now for several weeks. The haymakers have been remarkably uninterrupted this year by rain. Corn and potatoes are nearly spoiled. Our melons suffer the more because there was no drought in June and they ran to vine, which now they cannot support. Hence there is little fruit formed, and that small and dying ripe. Almost everywhere, if you dig into the earth, you find it all dusty. Even wild black cherries and choke-cherries are drying before fairly ripe, all shrivelled. Many are digging potatoes half grown. Trees and shrubs recently set out, and many old ones, are dying. A good time to visit swamps and meadows. I find no flowers yet on the amphicarpæa.

In a ditch behind Peter's a small *Cistudo Blandingii* swimming off rapidly. Its shell is four and a quarter inches long by three and a quarter wide in

rear, three wide in front; and its depth is nearly two inches, with a slight dorsal ridge, which the large one has not. I distinguished it from the *Emys guttata* at first glance by its back being sculptured concentrically about the rear side, leaving a smooth space within, a half-inch in diameter. My large one is almost entirely smooth on back, being sculptured only an eighth of an inch wide on circumference of each scale. It has small, rather indistinct yellow spots, somewhat regularly arranged in the middle of each scale. Head peppered with dull-yellow spots above; head, legs, and tail black above; head light-yellow beneath, and also legs about roots, passing into a dirty white. It is a very restless and active turtle, not once inclosing itself or using its valve at all, at once walking off when put down, keeping its head, legs, and tail out, continually running out its neck to its full extent, and often bending it backward over the shell. Its neck with the loose skin about it has a squarish form. Readily turns itself over with its head when on its back. Upper shell black; sternum light-brown, with a large black blotch on the outside after part of each scale and about half its area; five claws on fore feet, four and a rudiment or concealed one on hind feet. In this small one, the sculptured part occupies nearly the whole scale and is from a half to three quarters of an inch wide, while in the large one it is only an eighth of an inch wide, — a mere border. Apparently as it grows the smooth rear is extended or shoves forward and a portion of the sculptured part scales off.

In this ditch an interesting green jelly, conferva-

like at a little distance, perhaps a kind of frog-spawn, but without any *eyes* in it, of various forms, floating; often a sort of thick ring made of a hollow cylinder. Was that a proserpinaca in that ditch with all but two or three small leaves at top, pectinate? Saw there the large semipellucid, waved, heart-shaped radical leaves of a heart-leaf, green and purplish, sometimes all purplish, more delicate than the waved radical leaves of yellow lilies, etc., — a dimple of leaves. We can walk across the Great Meadows now in any direction. They are quite dry. Even the pitcher-plant leaves are empty. [The meadows] are covered with spatular sundew. Saw a snipe. There are fifteen or twenty haymakers here yet, but almost done. They and their loads loom at a distance. Men in their white shirts look taller and larger than near at hand.

I have just been through the process of killing the cistudo for the sake of science; but I cannot excuse myself for this murder, and see that such actions are inconsistent with the poetic perception, however they may serve science, and will affect the quality of my observations. I pray that I may walk more innocently and serenely through nature. No reasoning whatever reconciles me to this act. It affects my day injuriously. I have lost some self-respect. I have a murderer's experience in a degree.

The bobolinks alight on the wool-grass. Do they eat its seeds? The zizania on the north side of the river near the Holt, or meadow watering-place, is very conspicuous and abundant. Surprised to find the *Ludwigia sphærocarpa* apparently some time out (say

August 1st), in a wet place about twenty rods off the bars to the path that leads down from near Pedrick's; two to two and a half feet high, with a thick but unbroken bark about the base much like the decodon; no petals; yellowish seed-vessels. I think I saw a mockingbird on a black cherry near Pedrick's. Size of and like a catbird; bluish-black side-head, a white spot on closed wings, lighter breast and beneath; but he flew before I had fairly adjusted my glass. There were brown thrashers with it making their clicking note. The leaves of the panicled cornel are particularly curled by the heat and drought, showing their lighter under sides. Low blackberry vines generally are reddening and already give an October aspect to some dry fields where the early potentilla grows, as that plain of Pedrick's.

At Beck Stow's on new Bedford road, what I had thought a utricularia appears to be *Myriophyllum ambiguum*. One is floating, long and finely capillary leaves, with very few emersed and pectinate; another variety is on the mud, short, with linear or pectinate leaves. Perhaps they are the varieties *natans* and *limosum*. The last out some days, the first perhaps hardly yet. The green bittern there, leaving its tracks on the mud.

The *Solidago nemoralis* is now abundantly out on the Great Fields.

Aug. 19. P. M. — To Flint's Pond *via* railroad with Mr. Loomis.

The hills and fields generally have such a russet,

withered, wintry look that the meadows by the railroad appear to have got an exceedingly fresh and tender green. The near meadow is very beautiful now, seen from the railroad through this dog-day haze, which softens to velvet its fresh green of so many various shades, blending them harmoniously, — darker and lighter patches of grass and the very light yellowish-green of the sensitive fern which the mowers have left. It has an indescribable beauty to my eye now, which it could not have in a clear day. The haze has the effect both of a wash or varnish and of a harmonizing tint. It destroys the idea of definite distance which distinctness suggests. It is as if you had painted a meadow of fresh grass springing up after the mower, — here a dark green, there lighter, and there again the yellowish onoclea, — then washed it over with some gum like a map and tinted the paper of a fine misty blue. This is an effect of the dog-days.

There is now a remarkable drought, some of whose phenomena I have referred to during several weeks past, *q. v.* Of large forest trees the red maples appear to suffer most. Their leaves are very generally wilted and curled, showing the under sides. Perhaps not only because they require so much moisture, but because they are more nearly ripe, and there is less life and vigor in them. The *Populus grandidentata* perhaps suffers equally, and its leaves hang down wilted; even many willows. Many white birches long since lost the greater part of their leaves, which cover the ground, sere and brown as in autumn. I see many small trees quite dead, — birches, etc. I see amelan-

chier leaves scarlet, and black birch and willow yellowing. Various ferns are yellow and brown.

When I see at the brick-sand cutting how thin a crust of soil and darker sand, only three or four feet thick, there is above the pure white sand which appears to compose the mass of the globe itself, and this apparently perfectly dry, I am surprised that the trees are not all withered, and wonder if such a soil could sustain a large growth. After digging through ordinary soil and yellow sand three or four feet, you come to a pure white sand very evenly, abruptly, and distinctly separated from the former, and this is laid open to the depth of ten feet, — I know not how much deeper it extends, — so that the forest grows as it would in a wholly artificial soil made on a rock, perchance. I presume you would not now anywhere on these plains find any moisture in that four-feet crust, and there is never any in the sand beneath. I am surprised to see how shallow and dry all the available earth is there, in which the forest grows.

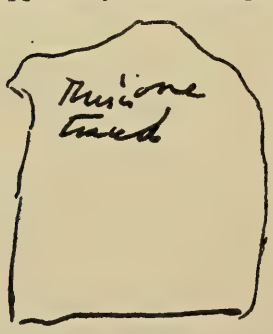
So like tinder is everything now that we passed three places within a mile where the old sleepers heaped up by the track had just been set on fire by the engine, — in one place a large pile.

Plenty of *Polygonum arifolium* in the ditch in the second field. Some barberries are red, and some thorn berries. A linear-leaved epilobium in Baker's, *i. e.* Mackintosh's, Swamp.

Flint's Pond has fallen very much since I was here. The shore is so exposed that you can walk round, which I have not known possible for several years,

and the outlet is dry. But Walden is not affected by the drought. There is such a haze we see not further than our Annursnack, which is blue as a mountain. *Lobelia Dortmanna* is still abundantly in flower, and hedge-hyssop, etc.; some clethra. There is a good deal of wind, but I see where the waves have washed ten feet further within an hour or two over the south shore. The wet sand is covered with small bird-tracks, perhaps peetweets', and is marked all over with the galleries of some small creatures, — worms or shellfish perhaps, — of various sizes, — some quite large, — which have passed under the surface like a meadow mouse. Are not these food for the water-birds? I find growing densely there on the southeast shore and at the *ball* shore, where it appears to have been covered with water recently, the *Myriophyllum tenellum*, another species of that of which I found two varieties yesterday; perhaps since August 1st. A new plant.

The *balls* again, *somewhat* stale, left high and dry apparently a month ago. Some five inches in diameter.



I find here and there, washed up, what I take to be the inner scales of a tortoise, and, in one place, where it fitted over the edge of the shell, thin and transparent like isinglass or parchment.

Plucked, about 4.30, one bunch of *Viburnum nudum* berries, *all* green, with very little pink tinge even. When

I got home at 6.30, nine were turned blue, the next morning thirty. It seems that they do not always pass through the deep-pink stage. They are quite sweet to eat, like raisins.

I noticed these birds in this walk: —

A lark, which sang.
White-bellied swallows on telegraph-wire.
Barn swallows, I think.
Nighthawks, which squeaked.
Heard a chewink *chewink*.
Saw cherry-birds flying lower over Heywood meadow like swallows, apparently for flies, and heard them, cricket-like.
Kingbirds quite common, twittering; one on telegraph-wire.
Bluebirds, saw and heard.
Chickadees, lisping note.
Jays, scream.
A woodcock, in wood-path, goes off with rattling sound.
Wilson's thrush's *yorrick*.
Saw crows.
Grouse.
Song sparrows, chirp.
Grass-bird and perhaps another sparrow.
Goldfinch, heard.

Aug. 20. *Sunday.* I hear no trilling of birds early.

5.15 A. M. — To Hill.

I hear a gold robin, also faint *song* of common robin. Wood pewee (fresh); red-wing blackbird with fragmentary trill; bobolinks (the males apparently darker and by themselves); kingbirds; nuthatch heard; yellow-throated vireo, heard and saw, on hickories (have I lately mistaken this for red-eye?); goldfinch; slate-colored hawk (with white rump and black wing-tips). The grape leaves even at this hour, after a dewy night, are still many of them curled upward, showing their

light under-sides, and feel somewhat crisped by the drought. This, I think, is one with that permanent standing up of the leaves of many trees at this season. Prinos berries have begun to redden. When the red-eye ceases generally, then I think is a crisis, — the woodland quire is dissolved. That, if I remember, was about a fortnight ago. The concert is over. The pewees sit still on their perch a long time, returning to the same twig after darting at an insect. The yellow-throated vireo is very restless, darting about. I hear a sound as of green pignuts falling from time to time, and see and hear the chickaree thereabouts ! !

P. M. — Up Assabet by boat to Bath.

A warm but breezy day, wind west by south. Water clear and sunny. I see much of my fresh-water sponge just above the Island, attached to the bottom, rocks, or branches under water. In form it reminds me of some cladonia lichens, for it has many branches like a lichen, being a green, porous, spongy substance, with long, slender, pointed fingers or horns, pointed upward or outward, the thickest about half an inch in diameter, and emits a peculiar, penetrating, strong, rank scent like some chemicals. The whole mass perhaps eight or ten inches in diameter. When raised to the surface it slowly sinks again. The bottom of the south branch is in many places almost covered with the short cut leaves of the sium, — as I call it. On the sandy bottom in midstream (mussel shoals), a dozen rods above the Rock, I notice a small (?) green

clam which must be the same with or similar to that which Perkins showed me in Newburyport. It has bright-green rays from the eye (?) on a light-green ground. Found in pure sand. Saw three. The rays show through to the inside. It is handsomer without than the common.

Some chickadees on the pitch pines over water near the Hemlocks look longer than usual, hanging back downward. See a strange bird about size of cedar-bird also on the pitch pine, perhaps greenish-olive above, whitish or ashy beneath, with a yellow vent and a dark line on side-head.[1] Saw a wood pewee which had darted after an insect over the water in this position in the air: It often utters a continuous *pe-e-e.*

The *Polygonum amphibium* at Assabet Rock, apparently several days, rising two or more feet above water. In many places I notice oaks stripped by caterpillars nowadays. Saw yesterday one of those great light-green grubs with spots. I see to-day many — more than a half-dozen — large wood tortoises on the bottom of the river, — some apparently eight to nine inches long in shell, some with their heads out. Are they particularly attracted to the water at this season? They lie quite still on the bottom.

Off Dodge's Brook, saw a fish lying on its side on the surface, with its head downward, slowly steering toward the shore with an undulating motion of the tail. Found it to be a large sucker which had apparently been struck by a kingfisher, fish hawk, or heron

[1] Could it have been the female rose-breasted grosbeak?

and got away. (The mill is not a-going to-day, Sunday.) It had been seized near the tail, which for three inches was completely flayed and much torn, lacerated, a part of the caudal fin being carried off. It had also received a severe thrust midway its body, which had furrowed its side and turned down a large strip of skin. It was breathing its last when I caught it. It was evidently too powerful for the bird which had struck it. I brought it home and weighed and measured it. It weighed two pounds and two ounces and was nineteen and a quarter inches long. Above, it was a sort of blue black or slate-color, darkest on the head, with blotches of the same extending down its sides, which were of a reddish golden, passing into white beneath. There were a few small red spots on the sides, just behind the gills. It had what I should call a gibbous head, but no horns; a line of fine mucous pores above and below eye; eyes at least one and a half inches apart; great corrugated ears on the lower lip; fins all dark like the back; nostrils double; opercula not golden; irides golden; scales on lateral line sixty-five (about), those near tail gone with skin. Fin rays, as I counted: pectoral, seventeen; ventral, ten; anal, nine; dorsal, thirteen; caudal, some wanting. Looking down on it, it was very broad at base of head, tapering thence gradually to tail. It had a double bladder, nearly six inches long by one inch at widest part. I think it must have been a kingfisher, it was so much lacerated at the tail.

Now, at 4 P. M., hear a croaking frog [1] near the

[1] Mole cricket. [See *postea.*]

water's edge, sounding like the faint quacking of a duck with more of the *r* in it, — something like *crack grack grack*, rapidly repeated. Though I knew that I must be within three feet of it, as I looked from the boat upon the shore, I could see nothing, but several times I interrupted him and caused him to jump. It is surprising how perfectly they are concealed by their color, even when croaking under one's eyes. It was *Rana palustris*, though I did not see it when it croaked. I after heard them further off, just before sunset, along the edge of the river, and saw that I had often mistaken their note for that of a cricket. So similar are these two earth-sounds. The cricket-like note of this little frog in the meadow ushers in the evening.

A man tells me to-day that he once saw some black snake's eggs on the surface of a tussock in a meadow just hatching, some hatched. The old one immediately appeared and swallowed all the young. Assabet quite low. Those beds of dirty green ostrich-feather potamogetons are much exposed and dry at top.

I perceive quite a number of furrows of clams in the sand, all leading from the side toward the middle of the river, with the clams at that end. Can they be going down now? They have not moved opposite Hubbard Bath, where they are in middle as well as by shore. Their position in the furrows is on their sharp edges, with what I will call their two eyes forward.

We had a very little drizzling rain on the 4th, and I think that was the last drop.

There is so thick a bluish haze these dog-days that single trees half a mile off, seen against it as a light-

colored background, stand out distinctly a dark mass, — almost black, — as seen against the more distinct blue woods. So, also, when there is less haze, the distinct wooded ridges are revealed one behind another in the horizon.

Aug. 21. P. M. — To Conantum *via* Hubbard Bath.

Leaves of small hypericums begin to be red. The river is warmer than I supposed it would become again, yet not so warm as in July. A small, wary dipper, — solitary, dark-colored, diving amid the pads. The same that lingered so late on the Assabet. Red choke-berries are dried black; ripe some time ago. In Hubbard's meadow, between the two woods, I cannot find a pitcher-plant with any water in it. Some of the Hubbard aster are still left, against the upper Hubbard Wood by the shore, which the mowers omitted. It looks like a variety of *A. Tradescanti*,[1] with longer, less rigid, and more lanceolate toothed cauline leaves, with fewer and more distant branchlets, and the whole plant more simple and wand-like. The bayonet rush has not generally blossomed this year. What has, long ago. Have noticed winged grasshoppers or locusts a week or more. Spikenard berries are now mahogany-color. Trillium berries bright-red. I see a woodchuck at a distance, cantering like a fat pig, ludicrously fat, first one end up, then the other. It runs with difficulty. The fever-bush berries are partly turned red, perhaps prematurely. Now, say, is hazel-

[1] *Vide* July 26, '56.

nut time. I think that my *Aster corymbosus* — at least the early ones — are *A. cordifolius*, since Wood makes this to vary to white and to have a flexuous stem. I see robins in small flocks and pigeon woodpeckers with them. Now see in pastures tufts of grass which have been pulled up by cattle, withered, quite thickly strewn. *Spiranthes cernua*, a day or two. Brought home a great *Eupatorium purpureum* from Miles's Swamp (made species *fistulosum* by Barratt). It is ten and a half feet high and one inch in diameter; said to grow to twelve feet. The corymb, eighteen and a half inches wide by fifteen inches deep; the largest leaves, thirteen by three inches. The stem hollow throughout. This I found, to my surprise, when I undertook to make a flute of it, trusting it was closed at the leaves; but there is no more pith there than elsewhere. It would serve many purposes, as a water-pipe, etc. Probably the Indians knew it and used. They might have blowed arrows through a straight one. It would yield an available hollow tube six feet long.

Did I see the yellow redpoll back? Head not conspicuously reddish.

Aug. 22. The haze, accompanied by much wind, is so thick this forenoon that the sun is obscured as by a cloud. I see no rays of sunlight.

A bee much like a honey-bee cutting rounded pieces out of rose leaves.

P. M. — To Great Meadows on foot along bank into Bedford meadows; thence to Beck Stow's and Gowing's Swamp.

Walking may be a science, so far as the direction of a walk is concerned. I go again to the Great Meadows, to improve this remarkably dry season and walk where in ordinary times I cannot go. There is, no doubt, a particular season of the year when each place may be visited with most profit and pleasure, and it may be worth the while to consider what that season is in each case.

This was a prairial walk. I went along the river and meadows from the first, crossing the Red Bridge road to the Battle-Ground. In the Mill Brook, behind Jones's, was attracted by one of those handsome high-colored masses of fibrous pink roots of the willow in the water. It was three or four feet long, five or six inches wide, and four or five inches thick, — long parallel roots nearly as big as a crow-quill, with innumerable short fibres on all sides, all forming a dense mass of a singular bright-pink color. There are three or four haymakers still at work in the Great Meadows, though but very few acres are left uncut. Was surprised to hear a phœbe's *pewet pewee* and see it. I perceive a dead mole in the path half-way down the meadow.

At the lower end of these meadows, between the river and the firm land, are a number of shallow muddy pools or pond-holes, where the yellow lily and pontederia, *Lysimachia stricta*, *Ludwigia sphærocarpa*, etc., etc., grow, where apparently the surface of the meadow was floated off some spring and so a permanent pond-hole was formed in which, even in this dry season, there is considerable water left. The great roots of

the yellow lily, laid bare by the floating off of the surface crust last spring, two and a half or three inches in diameter and a yard or more of visible length, look like great serpents or hydras exposed in their winter quarters. There lie now little heaps or collections of the singularly formed seed-vessels of the pontederia, as they have fallen on the mud, directly under the nodding but bare spikes.

In these shallow muddy pools, but a few inches deep and few feet in diameter, I was surprised to observe the undulations produced by pretty large fishes endeavoring to conceal themselves. In one little muddy basin where there was hardly a quart of water, caught half a dozen little breams and pickerel, only an inch long, as perfectly distinct as full grown, and in another place, where there was little else than mud left, breams two or three inches long still alive. In many dry hollows were dozens of small breams, pickerel, and pouts, quite dead and dry. Hundreds, if not thousands, of fishes had here perished on account of the drought.

Saw a blue heron — apparently a young bird, of a brownish blue — fly up from one of these pools, and a stake-driver from another, and also saw their great tracks on the mud, and the feathers they had shed, — some of the long, narrow white neck-feathers of the heron. The tracks of the heron were about six inches long. Here was a rare chance for the herons to transfix the imprisoned fish. It is a wonder that any have escaped. I was surprised that any dead were left on the mud, but I judge from what the book says that they do not touch dead fish. To these remote shallow

and muddy pools, usually surrounded by reeds and sedge, far amid the wet meadows, — to these, then, the blue heron resorts for its food. Here, too, is an abundance of the yellow lily, on whose seeds they are said to feed. There, too, are the paths of muskrats.

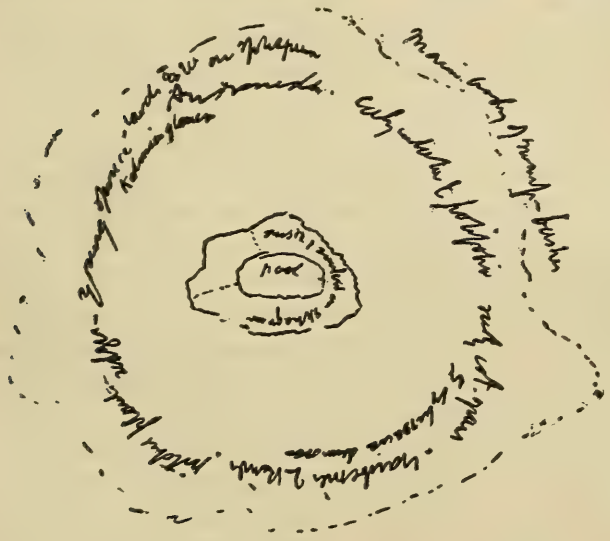
In most of the small hollows formed by the crust being carried off in the spring, the proserpinaca grows abundantly. There are now hopping all over this meadow small *Rana palustris*, and also some more beautifully spotted *halecina* or shad frogs. There is a pretty strong wind from the north-northwest. The haze is so thick that we can hardly see more than a mile. The low blue haze around the *distant* edge of the meadow looks even like a low fog, *i. e.* at a sufficient distance. I find at length a pitcher-plant with a spoonful of water in it. It must be last night's dew. It is wonderful that in all this drought it has not evaporated. Arum berries ripe. High blueberries pretty thick, but now much wilted and shrivelled.

Thus the drought serves the herons, etc., confining their prey within narrower limits, and doubtless they are well acquainted with suitable retired pools far in the marshes to go a-fishing in. I see in Pedrick's bushy and weedy meadow dense fields of *Solidago arguta*, *stricta* or *puberula* (?), and *altissima*, etc., now in its prime. Corn-stalks begin to be cut and stacked, it is so dry.

I hear that Brooks's meadow (it is what I called the burning by Joe Merriam's) is on fire and cannot be put out. Are not most ardeas (herons and bitterns) seen at this season?

Aug. 23. *Wednesday.* P. M. — To Gowing's Swamp and Hadlock Meadows.

I improve the dry weather to examine the middle of Gowing's Swamp. There is in the middle an open pool, twenty or thirty feet in diameter, nearly full of sphagnum and green froth on the surface (frog-spittle), and what other plants I could not see on account of the danger in standing on the quaking ground; then a dense border, a rod or more wide, of a peculiar rush (?),



with clusters of seed-vessels, three together, now going to seed, a yellow green, forming an abrupt edge next the water, this on a dense bed of quaking sphagnum, in which I sink eighteen inches in water, upheld by its matted roots, where I fear to break through. On

this the spatulate sundew abounds. This is marked by the paths of muskrats, which also extend through the green froth of the pool. Next comes, half a dozen rods wide, a dense bed of *Andromeda calyculata*, — the *A. Polifolia* mingled with it, — the rusty cotton-grass, cranberries, — the common and also *V. Oxycoccus*, — pitcher-plants, sedges, and a few young spruce and larch here and there, — all on sphagnum, which forms little hillocks about the stems of the andromeda. Then ferns, now yellowing, high blueberry bushes, etc., etc., etc., — or the bushy and main body of the swamp, under which the sphagnum is now dry and white.

I find a new cranberry on the sphagnum amid the *A. calyculata*, — *V. Oxycoccus*, of which Emerson says it is the "common cranberry of the north of Europe," cranberry of commerce there, found by "Oakes on Nantucket, in Pittsfield, and near Sherburne." It has small, now purplish-dotted fruit, flat on the sphagnum, some turned scarlet partly, on terminal peduncles, with slender, thread-like stems and small leaves strongly revolute on the edges.[1]

One of the Miss Browns (of the factory quarter) speaks of the yellow-flowered asclepias in that neighborhood. Crossed the Brooks or Hadlock meadows, which have been on fire (spread from bogging) several weeks. They present a singularly desolate appearance. Much of the time over shoes in ashes and cinders. Yellowish peat ashes in spots here and there. The peat beneath still burning, as far as dry, making

[1] *Vide* Aug. 30, '56.

holes sometimes two feet deep, they say. The surface strewn with cranberries burnt to a cinder. I seemed to feel a dry heat under feet, as if the ground were on fire, where it was not.

It is so dry that I walk lengthwise in ditches perfectly dry, full of the proserpinaca, now beginning to go to seed, which usually stands in water. Its pectinate lower leaves all exposed. On the baked surface, covered with brown-paper conferva.

Aug. 24. P. M. — To Fair Haven Pond by boat. A strong wind from the south-southwest, which I expect will waft me back. So many pads are eaten up and have disappeared that it has the effect of a rise of the river drowning them. This strong wind against which we row is quite exhilarating after the stiller summer. Yet we have no rain, and I see the blue haze between me and the shore six rods off.

The bright crimson-red under sides of the great white lily pads, turned up by the wind in broad fields on the sides of the stream, are a great ornament to the stream. It is not till August, methinks, that they are turned up conspicuously. Many are now turned over completely. After August opens, before these pads are decayed (for they last longer than the nuphars of both kinds), the stronger winds begin to blow and turn them up at various angles, turning many completely over and exposing their bright crimson(?)-red under sides with their ribs. The surface being agitated, the wind catches under their edges and turns them up and holds them commonly at an angle of 45°. It is

a very wholesome color, and, after the calm summer, an exhilarating sight, with a strong wind heard and felt, cooling and condensing your thoughts. This has the effect of a ripening of the leaf on the river. Not in vain was the under side thus colored, which at length the August winds turn up.

The soft pads eaten up mostly; the pontederias crisped and considerably blackened, only a few flowers left. It is surprising how the maples are affected by this drought. Though they stand along the edge of the river, they appear to suffer more than any trees except the white ash. Their leaves — and also those of the alders and hickories and grapes and even oaks more or less — are permanently curled and turned up on the upper three quarters of the trees; so that their foliage has a singularly glaucous hue in rows along the river. At a distance they have somewhat of the same effect with the silvered tops of the swamp white oak. The sight suggests a strong wind constantly blowing. I went ashore and felt of them. They were more or less crisped and curled permanently. It suggests what to a slight extent occurs every year. On the Cliffs so many young trees and bushes are withered that from the river it looks as if a fire had run over them. At Lee's Cliff larger ash trees are completely sere and brown, — burnt up. The white pines are parti-colored there.

Now, methinks, hawks are decidedly more common, beating the bush and soaring. I see two circling over the Cliffs. See a blue heron standing on the meadow at Fair Haven Pond. At a distance before you, only

the two waving lines appear, and you would not suspect the long neck and legs.

Looking across the pond, the haze at the water's edge under the opposite woods looks like a low fog. To-night, as for at least four or five nights past, and to some extent, I think, a great many times within a month, the sun goes down shorn of his beams, half an hour before sunset, round and red, high above the horizon. There are no variegated sunsets in this dog-day weather.

Aug. 25. I think I never saw the haze so thick as now, at 11 A. M., looking from my attic window. I cannot quite distinguish J. Hosmer's house, only the dark outline of the woods behind it. There appears to be, as it were, a thick fog over the Dennis plains. Between me and Nawshawtuct is a very blue haze like smoke. Indeed many refer all this to smoke.

Tortoise eggs are nowadays dug up in digging potatoes.

P. M. — Up Assabet by boat to Bath.

I think that the *Polygonum hydropiperoides* is now in its prime. At the poke-logan opposite the bath place, the pools are nearly all dry, and many little pollywogs, an inch long, lie dead or dying together in the moist mud. Others are covered with the dry brown-paper conferva. Some swamp white oaks are yellowish and brown, many leaves. The *Viburnum nudum* berries, in various stages, — green, deep-pink, and also deep-blue, not purple or ripe, — are very abundant at Shad-bush Meadow. They appear to be now in their prime

and are quite sweet, but have a large seed. Interesting for the various colors on the same bush and in the same cluster. Also the choke-berries are very abundant there, but mostly dried black. There is a large field of rhexia there now almost completely out of bloom, but its scarlet leaves, reddening the ground at a distance, supply the place of flowers.

We still continue to have strong wind in the middle of the day. The sun is shorn of his beams by the haze before 5 o'clock P. M., round and red, and is soon completely concealed, apparently by the haze alone. This blue haze is not dissipated much by the night, but is seen still with the earliest light.

Aug. 26. For a week we have had warmer weather than for a long time before, yet not so warm nearly as in July. I hear of a great many fires around us, far and near, both meadows and woods; in Maine and New York also. There *may* be some smoke in this haze, but I doubt it.

P. M. — To Dugan Desert.

I hear part of a phœbe's strain, as I go over the railroad bridge. It is the voice of dying summer. The pads now left on the river are chiefly those of the white lily. I noticed yesterday where a large piece of meadow had melted and sunk on a sandy bottom in the Assabet, and the weeds now rose above the surface where it was five feet deep around. It is so dry that I take the left of the railroad bridge and go through the meadows along the river. In the hollows where the surface of the meadow has been taken out within a year or two, spring

up pontederias and lilies, proserpinaca, polygonums, *Ludwigia palustris*, etc., etc. *Nasturtium hispidum* still in bloom, and will be for some time. I think I hear a red-eye. Rudbeckia,—the small one,—still fresh.

The *Poa hirsuta* is left on the upper edge of the meadows (as at J. Hosmer's), as too thin and poor a grass, beneath the attention of the farmers. How fortunate that it grows in such places and not in the midst of the rank grasses which are cut! With its beautiful fine purple color, its beautiful purple blush, it reminds me and supplies the place of the rhexia now about done.[1] Close by, or held in your hand, its fine color is not obvious,—it is but dull,—but [at] a distance, with a suitable light, it is exceedingly beautiful. It is at the same time in bloom. This is one of the most interesting phenomena of August.[2]

I hear these afternoons the faint, cricket-like note of the *Rana palustris* squatting by the side of the river, easily confounded with that of the interrupted cricket, only the last is more ringing and metallic.[3] How long has it been heard? The choke-cherry leaves are, some of them, from scarlet inclining to crimson. Radical leaves of the yellow thistle spot the meadow.

Opened one of my snapping turtle's eggs. The egg was not warm to the touch. The young is now larger and darker-colored, shell and all, more than a hemisphere, and the yolk which maintains it is much re-

[1] Leaving off, though I see some pretty handsome Sept. 4th.

[2] [*Excursions*, pp. 252, 253; Riv. 309, 310. The name of the grass appears there as *Eragrostis pectinacea*.]

[3] [See pp. 460, 461.]

duced. Its shell, very deep, hemispherical, fitting close to the shell of the egg, and, if you had not just opened the egg, you would say it could not contain so much. Its shell is considerably hardened, its feet and claws developed, and also its great head, though held in for want of room. Its eyes are open. It puts out its head, stretches forth its claws, and liberates its tail, though all were enveloped in a gelatinous fluid. With its great head it has already the ugliness of the full-grown, and is already a hieroglyphic of snappishness. It may take a fortnight longer to hatch it.

How much lies quietly buried in the ground that we wot not of! We unconsciously step over the eggs of snapping turtles slowly hatching the summer through. Not only was the surface perfectly dry and trackless there, but blackberry vines had run over the spot where these eggs were buried and weeds had sprung up above. If Iliads are not composed in our day, snapping turtles are hatched and arrive at maturity. It already thrusts forth its tremendous head, — for the first time in this sphere, — and slowly moves from side to side, — opening its small glistening eyes for the first time to the light, — expressive of dull rage, as if it had endured the trials of this world for a century. When I behold this monster thus steadily advancing toward maturity, all nature abetting, I am convinced that there must be an irresistible necessity for mud turtles. With what tenacity Nature sticks to her idea! These eggs, not warm to the touch, buried in the ground, so slow to hatch, are like the seeds of vegetable life.[1]

[1] [Channing, p. 283.]

Grapes ripe, owing to the hot dry weather.

Passing by M. Miles's, he told me he had a mud turtle in a box in his brook, where it had lain since the last of April, and he had given it nothing to eat. He wished he had known that I caught some in the spring and let them go. He would have bought them of me. He is very fond of them. He bought one of the two which Ed. Garfield caught on Fair Haven in the spring; paid him seventy-five cents for it. Garfield was out in his boat and saw two fighting on the pond. Approached carefully and succeeded in catching both and getting them into the boat. He got them both home by first carrying one along a piece, then putting him down and, while he was crawling off, going back for the other. One weighed forty-three or forty-four pounds and the other forty-seven. Miles gave me the shell of the one he bought, which weighed forty-three or forty-four. It is fifteen and six eighths inches long by fourteen and a half broad, of a roundish form, broadest backward. The smaller ones I have seen are longer in proportion to their length [*sic*], and the points larger also. The upper shell is more than four and a half inches deep and would make a good dish to bail out a boat with. Above it is a muddy brown, composed of a few great scales. He said he had no trouble in killing them. It was of no great use to cut off their heads. He thrust his knife through the soft thin place in their sternum and killed them at once. Told of one Artemas (?) Wheeler of Sudbury who used to keep fifteen or twenty in a box in a pond-hole, and fat them and eat them from time to time, having a great

appetite for them. Some years ago, in a January thaw, many came out on the Sudbury meadows, and, a cold snap suddenly succeeding, a great many were killed. One man counted eighty or more dead, some of which would weigh eighty to a hundred pounds. Miles himself found two shells on his river meadow of very large ones. Since then they have been scarce. Wheeler, he thought, used to go a-hunting for them the 2d (?) of May. It increases my respect for our river to see these great products of it. No wonder the Indians made much of them. Such great shells must have made convenient household utensils for them.

Miles once saw a large bullfrog jump at and catch a green snake ten inches long, which was running along the edge of the water, and hold it crosswise in its mouth, but the snake escaped at last.

Even the hinder part of a mud turtle's shell is scalloped, one would say rather for beauty than use.

Pigeons with their *quivet* dashed over the Dugan Desert.

Hear by telegraph that it rains in Portland and New York.

In the evening, some lightning in the horizon, and soon after a *little* gentle rain, which —

(*Aug.* 27) I find next day has moistened the ground about an inch down only. But now it is about as dry as ever.

P. M. — To Pine Hill *via* Turnpike and Walden.

Small *Bidens chrysanthemoides*, some time by Turnpike. The leaves of the smallest hypericum are very

many of them turned to a somewhat crimson red, sign of the ripening year. What I have called the Castile-soap gall, about one inch in diameter, handsomely variegated with a dirty white or pale tawny on a crimson ground; hard and perfectly smooth; solid and hard except a very small cavity in the centre containing some little grubs; full of crimson juice (which runs over the knife, and has stained this page [1] and blues my knife with its acid) for an eighth of an inch from the circumference, then lighter-colored.[2] Many red oak acorns have fallen.[3] The great green acorns in broad, shallow cups. How attractive these forms! No wonder they are imitated on pumps, fence and bed posts. Is not this a reason that the pigeons are about? The yellow birch is yellowed a good deal, the leaves spotted with green. The dogsbane a clear yellow. The cinnamon ferns hardly begun to turn or fall. The lice on the birches make it very disagreeable to go through them. I am surprised to find the brook and ditches in Hubbard's Close remarkably full after this long drought, when so many streams are dried up. Rice and others are getting out mud in the pond-hole opposite Breed's. They have cut down straight through clear black muck, perfectly rotted, eight feet, and it is soft yet further. Button-bushes, andromeda, proserpinaca, hardhack, etc., etc., grow atop. It looks like a great sponge. Old trees buried in it. On the Walden road some maples are yellow and some chestnuts brownish-yellow and also sere. From Heywood's

[1] [A brown stain on the page.]

[2] *Vide* [pp. 482, 483].

[3] Were they not cast down?

Peak I am surprised to see the top of Pine Hill wearing its October aspect, — yellow with changed maples and here and there faintly blushing with changed red maples. This is the effect of the drought. Among other effects of the drought I forgot to mention the fine dust, which enters the house and settles everywhere and also adds to the thickness of the atmosphere. Fences and roadside plants are thickly coated with it. I see much froth on alders. As I go up Pine Hill, gather the shrivelled *Vaccinium vacillans* berries, many as hard as if dried on a pan. They are very sweet and good, and not wormy like huckleberries. Far more abundant in this state than usual, owing to the drought. As I stand there, I think I hear a rising wind rustling the tops of the woods, and, turning, see what I think is the rear of a large flock of pigeons. Do they not eat many of these berries? Hips of the early rose changed. Some *Viburnum Lentago* berries, turned blue before fairly reddening. Blue-stemmed goldenrod, a day or two.

When I awake in the morning, I remember what I have seen and heard of snapping turtles, and am in doubt whether it was dream or reality. I slowly raise my head and peeping over the bedside see my great mud turtle shell lying bottom up under the table, showing its prominent ribs, and realize into what world I have awaked. Before I was in doubt how much prominence my good Genius would give to that fact. That the first object you see on awakening should be an empty mud turtle's shell!! Will it not make me of the earth earthy? Or does it not indicate that I am of the earth

earthy? What life, what character, this has shielded, which is now at liberty to be turned bottom upward! I can put specimens of all our other turtles into this cavity. This too was once an infant in its egg. When I see this, then I am sure that I am not dreaming, but am awake to this world. I do not know any more terrene fact. It still carries the earth on its back. Its life is between the animal and vegetable; like a seed it is planted deep in the ground and is all summer germinating. Does it not possess as much the life of the vegetable as the animal?

Would it not be well to describe some of those rough all-day walks across lots? — as that of the 15th, picking our way over quaking meadows and swamps and occasionally slipping into the muddy batter midleg deep; jumping or fording ditches and brooks; forcing our way through dense blueberry swamps, where there is water beneath and bushes above; then brushing through extensive birch forests all covered with green lice, which cover our clothes and face; then, relieved, under larger wood, more open beneath, steering for some more conspicuous trunk; now along a rocky hillside where the sweet-fern grows for a mile, then over a recent cutting, finding our uncertain footing on the cracking tops and trimmings of trees left by the choppers; now taking a step or two of smooth walking across a highway; now through a dense pine wood, descending into a rank, dry swamp, where the cinnamon fern rises above your head, with isles of poison-dogwood; now up a scraggy hill covered with shrub oak, stooping and winding one's way for half a

mile, tearing one's clothes in many places and putting out one's eyes, and find[ing] at last that it has no bare brow, but another slope of the same character; now through a corn-field diagonally with the rows; now coming upon the hidden melon-patch; seeing the back side of familiar hills and not knowing them, — the nearest house to home, which you do not know, seeming further off than the farthest which you do know; — in the spring defiled with the froth on various bushes, etc., etc., etc.; now reaching on higher land some open pigeon-place, a breathing-place for us.

I suppose that is a puffball, about two inches through (on the ground), roundish, brownish, cracked, pale wash-leather color, with a handsome, variegated slate-color within, not yet dusty, contrasting with the outside.

Aug. 28. Much cooler this morning, making us think of fire. This is gradually clearing the atmosphere, and, as it is about as dry as ever, I think that haze was not smoke; quite as dry as yesterday.

P. M. — By Great Meadows and Bedford meadows to Carlisle Bridge; back by Carlisle and Concord side across lots to schoolhouse.

Improve the continued drought to go through the meadows. There is a cool east wind (it has been east a good deal lately in this drought), which has cleared the air wonderfully, revealing the long-concealed woods and hills in the horizon and making me think of November even. And now that I am going along the path to the meadow in the woods beyond Peter's, I perceive the fall shine on the leaves and earth; *i. e.*, a great deal

of light is reflected through the clearer air, which has also a vein of coolness in it. Some crotalaria pods are now black and dry, and rattle as I walk. The farmers improve this dry spell to cut ditches and dig mud in the meadows and pond-holes. I see their black heaps in many places. I see on the Great Meadows circular patches — the stubble of a coarse light-green sedge (apparently cut-grass) — of various dimensions, which look as if they had been brought from other places and dropped there in the spring. Yet they are very numerous and extensive, running into one another, yet with a rounded or coarsely crenate edge. In fact, they probably cover the greater part of the meadow. It must be that the cut-grass merely spreads in circles. There are some in the meadow near the Kibbe Place. It makes firm ground. Between these are the dark-colored patches of cranberries, ferns, and finer grasses (?) of such singular forms as are used in lace-work, like the spaces left between circles, suggesting that this is the groundwork on which the other is dropped. Or does the cut-grass (?) incline to grow in this circular manner?

The meadow is drier than ever, and new pools are dried up. The breams, from one to two and a half inches long, lying on the sides and quirking from time to time, a dozen together where there is but a pint of water on the mud, are a handsome but sad sight, — pretty green jewels, dying in the sun. I saved a dozen or more by putting them in deeper pools. Saw a whole school of little pouts, hundreds of them one and a half

inches long, many dead, all apparently fated to die, and some full-grown fishes. Several hairworms four or five inches long in this muddy water. The muddy bottom of these pools dried up is cracked into a sort of regular crystals. In the soft mud, the tracks of the great bittern and the blue heron. Scared up one of the former and saw a small dipper on the river. Just after entering the Bedford meadows (travelling north), for perhaps a mile in length and the width of the meadow, the surface on all sides had been lifted or tilted up, showing the blue edges of the soil, so that there was hardly a level square rod, — giving the aspect of waves two feet high or more with numerous holes and trenches, and making it very difficult to mow it, as well as to walk over it, and here and there permanent pools were made in it. I do not know why it should have happened there more than elsewhere. Found the *Ludwigia sphærocarpa* down that way.

It seems that the upper surface of the *Victoria regia* is "a light green" and the under "a bright crimson," according to Schomburgk, its discoverer. In this it is like our white lily pads.

We did not come to a fence or wall for about four miles this afternoon. Heard some *large* hawks whistling much like a boy high over the meadow.

Observed many of those Castile-soap galls from a tenth of an inch to an inch in diameter on a *Quercus ilicifolia*. They are attached to the outer edge of the cup, commonly filling the space between two acorns, and look as if they had merely lodged between them, dropping out readily, though they are slightly attached

to one cup. I see some not much bigger than a pin's head, in the place, and reminding me of those small abortive acorns which so often grow on the cup of the small chinquapin. May not these galls be connected with those and be also an abortive acorn? I have three, of medium size, on the edge of one acorn-cup, and not occupying more than one third its circumference, unsupported by any neighboring cup, the middle one the smallest, being apparently crowded. Apparently the insect deposits its egg in the edge of the cup, and this egg, as in all galls, is, I should say, at once the seed of vegetable and of animal life: it produces the vegetable gall, and is the seed of it, also the animal. May it not be regarded as the seed of the gall, as well as the ovum of the insect?

Moles make heaps in meadows.

In my experience, at least *of late years*, all that depresses a man's spirits is the sense of remissness, — duties neglected, unfaithfulness, — or shamming, impurity, falsehood, selfishness, inhumanity, and the like.

From the experience of late years I should say that a man's seed was the direct tax of his race. It stands for my sympathy with my race. When the brain chiefly is nourished, and not the affections, the seed becomes merely excremental.

Saw a bushel of hazelnuts in their burs, which some boy had spread on the ground to dry behind Hodgman's. Observed yesterday, in a pool in what was Heywood's peat meadow south of, but near, Turnpike, apparently a utricularia, very small with minute forked green leaves, and bladders on bare

threads, rooting in mud at bottom; apparently out of bloom. Also another kind with long stems, many black bladders, and no *obviously* green leaves, filling the pools in Hubbard's Close.

Aug. 29. A cool morning with much fog, — more than yesterday. Have not had much during the warmer part of the drought, methinks.

Cattle are driven down from up-country. Hear the drovers' *whoa whoa whoa* or *whay whay whay.*

Where I walked yesterday it appeared as if the whole surface of the meadow had been at one time lifted up, but prevented by shores or bushes or ice from floating off, then broken up by wind and waves, and had finally melted and sunk irregularly, near where it rose. I repeatedly stepped into the long crack-like intervals between the cakes.

When our meadows are flooded in the spring and our river is changed to a sea, then the gulls, the sea birds, come up here to complete the scene. Or are they merely on their way eastward?

Were not those large, and often pointed, rocks occasionally seen on the meadows brought there by the floating meadow, and so dropped broad end down?

P. M. — To Derby Bridge neighborhood and front of Tarbell's.

It is a great pleasure to walk in this clearer atmosphere, though cooler. How great a change, and how sudden, from that sultry and remarkably hazy atmosphere to this clear, cool autumnal one, in which all things shine, and distance is restored to us! The wind

blew quite hard in the midst of that haze, but did not disperse it. Only this cooler weather with a steady east wind has done it. It is so cool that we are inclined to stand round the kitchen fire a little while these mornings, though we sit and sleep with open windows still. I think that the cool air from the sea has condensed the haze, not blown it off. The grass is so dry and withered that it caught fire from the locomotive four or five days ago near the widow Hosmer's, and the fire ran over forty or fifty rods, threatening the house, -- grass which should have afforded some pasturage. The cymes of elder-berries, black with fruit, are now conspicuous.

Up railroad. Poison sumach berries begin to look ripe, — or dry, — of a pale straw-color. The zizania is pretty abundant in the river, in rear of Joseph Hosmer's. A small, what his father calls partridge hawk killed many chickens for him last year, but the slate-colored hawk never touches them. Very many water-plants — pontederias, lilies, zizania, etc., etc.— are now going to seed, prepared to feed the migrating water-fowl, etc. Saw a hop-hornbeam (*Ostrya*) on which every leaf was curiously marked with a small rather. triangular brown spot (eaten) in the axils of the veins next the midrib, oppositely or alternately. Under side lower leaves of *Lycopus Virginicus* lake-color. I see where the squirrels, apparently, have stripped the pitch pine cones, scattering the scales about. Many birds nowadays resort to the wild black cherry tree, as here front of Tarbell's. I see them continually coming and going directly from and to a great distance, — cherry-

birds, robins, and kingbirds. I enjoy the warmth of the sun now that the air is cool, and Nature seems really more genial. I love to sit on the withered grass on the sunny side of the wall. My mistress is at a more respectful distance, for, by the coolness of the air, I am more continent in my thought and held aloof from her, while by the genial warmth of the sun I am more than ever attracted to her. I see a boy already raking cranberries. The moss rose hips will be quite ripe in a day or two. Found a new and erect euphorbia (*hypericifolia*) on the slope just east of his lizard ditches, still in bloom and pretty, probably open first in July. At Clamshell Bank the barn swallows are very lively, filling the air with their twittering now, at 6 P. M. They rest on the dry mullein-tops, then suddenly all start off together as with one impulse and skim about over the river, hill, and meadow. Some sit on the bare twigs of a dead apple tree. Are they not gathering for their migration?

Early for several mornings I have heard the sound of a flail. It leads me to ask if I have spent as industrious a spring and summer as the farmer, and gathered as rich a crop of experience. If so, the sound of my flail will be heard by those who have ears to hear, separating the kernel from the chaff all the fall and winter, and a sound no less cheering it will be. If the drought has destroyed the corn, let not all harvests fail. Have you commenced to thresh your grain? The lecturer must commence his threshing as early as August, that his fine flour may be ready for his winter customers. The fall rains will make full springs and raise his

streams sufficiently to grind his grist. We shall hear the sound of his flail all the fall, early and late. It is made of tougher material than hickory, and tied together with resolution stronger than an eel-skin. For him there is no husking-bee, but he does it all alone and by hand, at evening by lamplight, with the barn door shut and only the pile of husks behind him for warmth. For him, too, I fear there is no patent corn-sheller, but he does his work by hand, ear by ear, on the edge of a shovel over a bushel, on his hearth, and after he takes up a handful of the yellow grain and lets it fall again, while he blows out the chaff; and he goes to bed happy when his measure is full.

Channing has come from Chelsea Beach this morning with *Euphorbia polygonifolia* in flower, bayberry in fruit, datura in flower, staghorn sumach fruit, chenopodium (it seems not to be made a distinct species, though very mealy), scarlet pimpernel still in flower, *Salsola Kali* (the prickly plant), and apparently *Solidago sempervirens*.

Aug. 30. Another great fog this morning, which lasts till 8.30. After so much dry and warm weather, cool weather has suddenly come, and this has produced these two larger fogs than for a long time. Is it always so?

Hear a warbling vireo faintly in the elms.

P. M. — To Conantum *via* Clamshell Hill and meadows.

The clearness of the air which began with the cool morning of the 28th makes it delicious to gaze in any

direction. *Though there has been no rain,* the valleys are emptied of haze, and I see with new pleasure to distant hillsides and farmhouses and a river-reach shining in the sun, and to the mountains in the horizon. Coolness and clarity go together. What I called *Solidago altissima,* a simple slender one with a small head, some time, — perhaps not to be distinguished. Crossed the river at Hubbard's Bath. Apparently as many clams lie up as ever. The two river polygonums may be said to be now in prime. The *hydropiperoides* has a peculiarly slender waving spike. The *Bidens Beckii* made the best show, I think, a week ago, though there may be more of them open now. They are not so widely open. Was not that a meadow-hen which I scared up in two places by the riverside,

— of a dark brown like a small woodcock, though it flew *straight* and low? I go along the flat Hosmer shore to Clamshell Hill. The sparganium seed balls begin to brown and come off in the hand. The *Ammannia humilis* is quite abundant on the denuded shore there and in John Hosmer's meadow, now turned red and so detected, reddening the ground. Are they not young hen-hawks which I have seen sailing for a week past, without red tails?

I go along through J. Hosmer's meadow near the river, it is so dry. I see places where the meadow has been denuded of its surface within a few years, four or five rods in diameter, forming shallow platters, in which the *Lysimachia stricta, small* hypericums, lindernia, gratiola, pipes, ammannia, etc., grow. I walk dry-shod quite to the phalanxes of bulrushes of

a handsome blue-green glaucous color. The colors of the rainbow rush are now pretty bright. The floating milfoil at Purple Utricularia Shore, with red stem. Blue-eyed grass still. Dogwood leaves have fairly begun to turn. A *few* small maples are scarlet along the meadow. A dark-brown or black shining, oval or globular, fruit of the skunk-cabbage, with prominent calyx, filaments, and style roughening it, is quite handsome like a piece of carved ebony (or dogwood?). I see its small green spathes already pushing up.

The berries are about all dried up or wormy — I am on Conantum — though I still eat the dried blueberries. There are now none to pluck in a walk, unless it be black cherries and apples. I see brown thrashers on the black cherry tree and hear their sharp click like a squirrel. Hazelnut time about a week ago, — to be in advance of the squirrels. I see the dried reddened burs and shells under every bush where they have been. The *Bidens frondosa*, some time; distinguished by its being fairly pinnate, with from three to five leafets. Notice the radical leaves of primrose. The huckleberries are so withered and brown in many places, owing to the drought, that they appear dead and as if they were some which had been broken up by the pickers, or as if burnt. Some white ash trees have suffered more than any others I have noticed, on Cliffs their leaves being quite brown and sere.

Minot Pratt here this evening. He tells me he finds a *white* hardhack, bayberry in Holden's pasture, and, on the old Carlisle road, *Cornus florida*, near Bateman's Pond, and what Russell thought a rare hedysa-

rum somewhere. Pratt once caught a mud turtle at Brook Farm which weighed forty-six pounds.

Aug. 31. Warmer this morning and considerably hazy again. Wormwood pollen yellows my clothes commonly.

Ferris in his "Utah," crossing the plains in '52, says that, on Independence Rock near the Sweetwater, "at a rough guess, there must be 35,000 to 40,000" names of travellers.[1]

P. M. — To Lincoln.

Surveying for William Peirce. He says that several large chestnuts appear to be dying near him on account of the drought. Saw a meadow said to be still on fire after three weeks; fire had burned holes one and a half feet deep; was burning along slowly at a considerable depth. P. brought me home in his wagon. Was not quite at his ease and in his element; *i. e.*, talked with some reserve, though well behaved, unless I approached the subject of horses. Then he spoke with a will and with authority, betraying somewhat of the jockey. He said that this dry weather was "trying to wagons; it loosened the *ties*," — if that was the word.[2] He did not use blinders nor a check-rein. Said a horse's neck must ache at night which has been reined up all day. He said that the outlet of F[lint's] Pond had not been dry before for four years, and then only two or three days; now it was a month.

Notwithstanding this unprecedented drought our

[1] [Benjamin G. Ferris, *Utah and the Mormons.* New York, 1854.]

[2] Probably "tires."

river, the main stream, has not been very low. It may have been kept up by the reservoirs. Walden is unaffected by the drought, and is still very high. But for the most part silent are the watercourses, when I walk in rocky swamps where a tinkling is commonly heard.

At nine this evening I distinctly and strongly smell smoke, I think of burning meadows, in the air in the village. There must be more smoke in this haze than I have supposed. Is not the haze a sort of smoke, the sun parching and burning the earth?

END OF VOLUME VI

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